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# The Journal of Cutaneous Diseases

INCLUDING SYPHILIS

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## OSTEOPATHIES OF QUATERNARY SYPHILIS.

By PROFESSOR GAUCHER and Dr. LEVY-BING, Paris.

Read before the Sixth International Dermatological Congress, New York, September 9-14, 1907.

**I**N a former paper,<sup>1</sup> one of us showed that tertiary heredo-syphilis may produce suppurative bone lesions, absolutely similar clinically to tuberculous osteitis, and whose diagnosis can be established only by the rather quick curative effect of specific treatment.

The aim of the present paper is to show that *quaternary heredo-syphilis*, or *para-heredo-syphilis* may also engender bone or joint lesions, generally mistaken for the tubercular lesion of same aspect; or, at least, that those bone and joint lesions exist with incomparable frequency, in subjects showing undeniable heredo-syphilitic dystrophies.

Children, bearers of tuberculous arthritis, hip, or Pott's disease, are very often, we shall even say almost always, first or second generation descendants of syphilitics. In order to confirm this opinion, we systematically examined the children presenting suppurative bone lesions treated in Berck-sur-Mer hospitals and we were surprised at the really strikingly high percentage of heredo-syphilitics we came across.

We first went through, thanks to Dr. Ménard's kindness, a few wards of Berck's Maritime Hospital where children, boys and girls, afflicted with tubercular osseous lesions (hip disease, Pott's disease, white swellings, etc.), are treated. We were impressed, from the start, by the considerable number of heredo-syphilitics whose typical facies draws the eye: saddle nose, nose "*en lorgnette*," prominent (so-called olympic) forehead, very developed and very apparent veins of the forehead and temple, natiform skull, deformed auricle, etc., etc. A closer examination of the same children enabled us to detect other cranial, dental, palatal, ocular and bony dystrophies.

<sup>1</sup> Suppurative osteitis and osteoarthritis of tertiary heredo-syphilis. Prof. Gaucher, *Annales des Maladies Vénériennes*, T. II., No. 1, Aout, 1907.

All varieties of dystrophies are exceedingly common, either gathered all in the same subject, in whom they so abound that no room is left for any doubt as to specific heredity, or more scattered, two or three only existing, but still sufficient to enable us to affirm the specific origin of the bearers. Not unfrequently does heredo-syphilis show but one stigma, but we did not consider as syphilitic children having only one manifestation, even when the latter was as pathognomonic as a saddle nose; this, in order to avoid the easily formulated objection that we counted as syphilitic patients who did not present undoubted evidence of the disease. However, we know that even a very thorough and very attentive examination sometimes fails to elicit the least dystrophy in undeniably heredo-syphilitic subjects. Therefore we included in our statistics only those children having at least three stigmata, for instance: dental alterations, a saddle nose, and fronto-temporal venous ectasies. We have voluntarily left aside those having only one or two defects, even, when under the other circumstances, the latter would have been sufficient to warrant a diagnosis of heredo-syphilis. We do not want to draw down upon us the reproach of seeing syphilis and syphilitic heredity everywhere; and it follows that our figures are far below the reality.

In Berck's Maritime Hospital, we examined 153 children taken at random, 71 boys and 82 girls. Among those, we found 30 (10 boys and 20 girls) presenting all the features of heredo-syphilis. Ten were under treatment for Pott's disease, 15 for unilateral, either right or left, hip disease, 1 for double hip disease, 1 for white swelling of the elbow, 2 for white swelling of the wrist, and 2 for suppurative cervical adenitis. The age varied, for the boys, of from 28 months to 7 years, and, for the girls, of from 3 to 12 years.

We are indebted to Dr. Calot for a thorough visit of the Oise hospital.<sup>2</sup> There we examined all the patients, 94 in number; 70 ranging from 3 to 12.5 years (32 girls and 38 boys); and 24 above 12.5 years (12 boys, 12 girls). Among those 94 patients, we found exactly 38 showing very numerous stigmata of heredo-syphilis; said stigmata being in some cases so complete and so multiple that the bearers might have been considered as real types of specific heredity.

Among the 70 children of the younger class, there were 13 heredo-syphilitic girls and 22 boys; of the 24 older, there were only 3 heredo-syphilitics, all boys. None of the 12 girls presented sufficiently characteristic or numerous dystrophies for us to place her on

<sup>2</sup> We desire to express our thanks to Dr. Calot's assistants, Drs. Michel and Privat, for their courtesy and for the readiness which they displayed to make our task easier.

our list. All these children were under treatment for some of the following conditions: hip disease (among which were 2 suppurative cases), Pott's disease (among which 1 fistulous case), tubercular osteo-arthritis, arthritis of the ankle joint, osteitis of the tibia and suppurative gummata of the buttock.

We also went through Dr. Calot's Orthopedic Institute and through the Cazin-Perrochaud Hospital. There, also, we noticed the great number of heredo-syphilitics in the wards, but we did not study their lesions in detail. Besides, the figures we collected in the two Berck hospitals we just mentioned (Maritime hospital and Oise hospital), are enough for the present time to demonstrate what we want to prove, viz., the extreme frequency of tuberculous bony lesions in quaternary heredo-syphilitic subjects.

The diagnostic elements derived from the family of the patient, either direct ascendants or collaterals, we missed altogether in our inquiry; just as we miss them in most hospital cases. Those supplied by the patient himself are the only ones we could have and use. And yet, in many cases, we could not take into account the previous history, because many of the children were too young to answer our questions in a useful manner and to give us some information on the accidents and morbid peculiarities of their infancy. In those cases, direct examination enabled us, much better and much more safely than any memory data, to make a diagnosis of heredo-syphilis. All patients included in our statistics presented simultaneously diversely allied and very numerous dystrophies which are summarized in the following table:

1—*Skull and face:*

Olympic forehead.

Cranial asymmetry.

Saddle nose.

Ogival or very deep round palate.

These are extremely frequent; the following are less and are placed in order of decreasing frequency:

Dolichocephaly.

Malformation of the auricle.

Prognathism of lower jaw.

Transverse widening of skull.

Natiform skull.

Hydrocephalus (2 cases.)

Harelip (1 case.)

2—*Teeth:*

Asymmetry, defective orientation, amorphism.

Microdontism.

Abnormally distant teeth.

"Screw-driver" teeth.

Multiple and systematized dystrophies of the crown, corrugated and striated teeth, all very frequent lesions.

Absence of upper canines or incisors (2 cases.)

Atrophy of the crown of the first large molar (2 cases.)

Typical Hutchinson's tooth (2 cases.)

3—*Venous system:*

Dilatation of the veins of the forehead, the temples, or the root of the nose, where they form a very developed and prominent network. We found such an hypertrophy of the venous system in a great number of patients.

4—*Joints and bones:*

Exostoses and hyperostoses.

Thoracic deformities.

Deformities of the limbs (genu valgum, epiphyseal nodosities.)

Deformities of the spine.

The foregoing are very common. The following are rarer:

Chronic hydrarthrosis.

Deforming arthropathies (4 cases.)

Congenital hip dislocation (3 cases.)

Dactylitis (2 cases.)

Multiple spinæ ventosæ of both hands (1 case.)

Club foot (1 case.)

Club hand (1 case.)

5—*Eyes:*

Active interstitial keratitis (1 case.)

Double convergent strabismus.

Professor Gaucher insists particularly on the value of the latter as a symptom of heredo-syphilis. Now, we found it, more or less marked, in 44 out of our 68 heredo-syphilitic children. We shall not dwell any longer on that so common and little known stigma, which Dr. Antonelli has studied, in an article published in the Feb., 1907 issue of the *Annales des Maladies vénériennes*.

It would have been also very interesting to perform ophthalmoscopic examinations of the fundus, in all the children under consideration, and we feel sure that a systematic examination of all fundi, even of children apparently free from all dystrophies, would have discovered still a number of heredo-syphilitics whom we did not even sus-



pect; because ocular lesions exist often alone and unassociated with any other hereditary dystrophy; and also because they are among the most frequent. Fournier says they exist in 43% of cases, and Edmond Fournier raises the ratio to 48%. Now, those lesions are precisely those we could least observe, for we have not made any ophthalmoscopic examinations, and barring the cases of strabismus and a few scars of interstitial keratitis, we did not look for ocular symptoms.

Consequently our statistics sin rather by omission than by excess. Summing up, in 247 patients examined, we found 68 tainted with hereditary syphilis. There is a long step between this and the conclusion that all tuberculous lesions presented by those children have a syphilitic origin; but such a frequent occurrence of tuberculous lesions in children showing all the stigmata of specific heredity must be noted and we cannot but be impressed by the comparison.

Of course, our study lacks one element, namely, therapeutic proof. It would have been necessary to submit those children, especially those with suppurative lesions, to a specific course of treatment with soluble mercurial injections and potassium iodide. We can, however, quote a personal case, in which a child presenting *none* of the stigmata of hereditary syphilis and bearing a fistulous Pott's disease, had her lesions very favorably modified by hydrargyric medication. The case is as follows:

Female child, three years old, always in good health, without any hereditary marks, born of a healthy mother and of a formerly syphilitic father, treated during three or four years with pills and injections of gray oil. In January, 1906, the child developed suddenly a very painful wry-neck on the right side; after two weeks rotation and flexion of the head became impossible. The symptoms were at first ascribed to rheumatism and treated with liniments and by rubbing, the pain, however, increasing steadily and motion becoming more and more limited. The parents sought the advice of a surgeon who diagnosed a tuberculous cervical arthritis. The little patient was treated accordingly (over-feeding, cod liver oil, syrupus ferri iodidi, immobilization). But the arthritis, instead of improving, grew worse and soon opened in the cervical region through a long, profusely suppurating, sinus. The latter was cauterized, scraped, dressed during a certain time; and then, viewing the uselessness of all attempts, we prescribed mercurial inunctions, 4 grammes daily, supplemented by potassium iodide. A first course of 15 inunctions was given; next month, 15 others were given and during the resting interval, the child took 1 gramme potassium iodide daily. Under

the influence of that energetic treatment, the secretion was modified very rapidly, the sinus healed progressively, pain disappeared entirely, movements became free again; the general condition improved and the child regained the splendid complexion she had before. However, immobilization was still kept up.

Many such lesions, although manifestly syphilitic in their origin, are not amenable to mercurial medication, because they belong to quaternary heredo-syphilis. There lies precisely the difference between tertiary heredo-syphilitic osteitis and quaternary heredo-syphilitic osteopathies; the former are cured quickly and permanently by the specific treatment, while the latter are little or not at all modified by the same.

But, anyway, even if there are no symptoms, even if a direct examination or search in the previous history does not give any definite clue as to hereditary syphilis, it may be beneficial (and there is no inconvenience in it) to administer mercurial treatment in doubtful cases, if any symptomatic abnormality leads us to suspect syphilis. Sometimes, unexpected cures will obtain, or, at least, favorable changes in the ground on which an osteopathy develops, the diagnosis of which will have been enlightened by the coexistence of other dystrophies.

We conclude, therefore, that heredo-syphilis, either directly or in the second generation, is an important factor in the production of suppurative bone and joint conditions of childhood; white swellings, hip and Pott's disease; whether the lesions be directly dependent on quaternary heredo-syphilis or whether hereditary taint be only a capital predisposing cause for tuberculous lesions.

Translation of this paper kindly made for the JOURNAL OF CUTANEOUS DISEASES, by Dr. Faxton E. Gardner, New York.

ERYTHEMA EXUDATIVUM MULTIFORME, ITS PRESENT  
SIGNIFICANCE—WITH A REPORT OF A CASE OF  
ERYTHEMA CIRCINATUM BULLOSUM ET HÆMOR-  
RHAGICUM, FOLLOWING A GUNSHOT WOUND, AP-  
ARENTLY DUE TO STEPTOCOCCUS INFECTION  
AND TERMINATING FATALLY.

By WILLIAM THOMAS CORLETT, M. D., Cleveland, Ohio.

Read before the Sixth International Dermatological Congress, New York,  
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THE first step towards grouping the objective manifestations of erythema<sup>1</sup> was made by Hebra in 1854.<sup>2</sup> Previous to this time the various forms delineated by Willan<sup>3</sup> in 1808, were accepted and treated of as distinct affections. It is true other observers had paved the way, for in 1835 Rayer<sup>4</sup> cited cases collected by Bonnet in which several varieties of erythema were seen on the same individual.

Hebra observed that the various types of the erythemata as portrayed by Willan and Plenck,<sup>5</sup> often changed from one form to another and occasionally several types were found coexisting. "In reference to this point," he writes, "experience has taught me that the erythema papulatum, erythema tuberculatum, erythema annulare, erythema iris, erythema gyratum, are merely forms of the same disease in different stages, the appearance varying according as the affection is undergoing development, or in a later period of its course, or subsiding. To this malady I shall apply the name of erythema multiforme."<sup>6</sup>

The erythema multiforme as recognized by Hebra was a clearly defined affection running a self-limited course in from two to four weeks, although subject to recurrence.

In 1876 Lewin<sup>7</sup> collected a number of fatal cases of erythema multiforme and maintained that the conception of the affection then held, was too circumscribed, and that certain cases presented the characteristics of an infection. For these he proposed the name erythema exudativum.

Uffelmann<sup>8</sup> also reported cases to substantiate this claim.

The cases thus described were not generally recognized as indubitable instances of erythema multiforme, nor were the conclusions derived therefrom generally accepted. Both Kaposi<sup>9</sup> and Schwimmer,<sup>10</sup> while recognizing a bullous form and extending the boundaries of the affection as outlined by Hebra, still insisted that the disease adhered to a definite type, self-limited in its course and terminating in recovery. The former proposed the name erythema polymorphe. This view has largely obtained both in England and America. Thus Crocker<sup>11</sup> while describing in full the various forms erythema multiforme may assume, does not attribute its occasional fatality to the erythema, but to the diseases with which it is concomitant. The most recent works on dermatology in this country, that of Hyde and Montgomery (1904), Stelwagon (1905), and Pusey (1907), while enlarging the domain and portraying a variety of clinical manifestations under this caption, still maintain a clearly defined boundary and benign character of the disease.

Osler<sup>12</sup> studying erythema multiforme from the viewpoint of general medicine, regards it as a symptom, not always present, of various diseases of the internal viscera.

In France the almost limitless variety of clinical manifestations that erythema multiforme may assume has long been recognized. In 1835 Gibert<sup>13</sup> wrote that erythema may be symptomatic, due to derangements of the internal viscera, and the following year Rayer spoke of arthritic fever and cutaneous hæmorrhages in connection with erythema, but drew a sharp distinction between the erythematos and bullous dermatoses.

Besnier and Doyon,<sup>14</sup> not only agree with Lewin and Uffelmann that erythema multiforme may pursue a malignant course, but further speak of it as a disease, if disease it may be called, that defies definite classification, an affection of almost infinite variety of clinical symptoms, and under whose cognomen new forms occur from time to time in the observation of the most experienced clinician.

Since the beginning of the eighteenth century it has been associated with various diseases, notably purpura, rheumatism, urticaria and pemphigus, until the clinical line of demarkation at times between them is not clear. The cases reported by Mackenzie,<sup>15</sup> Osler, Fayrer<sup>16</sup> and Wright<sup>17</sup> go to strengthen the claim of this relationship. On the other hand it has also occurred in connection with such definite affections as gonorrhœa, syphilis, tuberculosis, pneumonia, enteric fever, leprosy and Bright's disease. While more



PLATE I—To Illustrate Dr. W. T. Corlett's Article.





recently Galloway and MacLeod<sup>18</sup> have associated it with lupus erythematosus.

While it is disconcerting alike to the student and to the clinical teacher, yet we must admit that the definite limitations of erythema multiforme are at present unknown. Nor can we hope for a clear elucidation until the *fons et origo* of the manifold symptoms which constitute what we call erythema multiforme are better understood.

As in classification so in etiology and pathology the great problem relating to erythema multiforme has apparently repeatedly been solved. In 1864 Köbner,<sup>19</sup> followed by Auspitz,<sup>20</sup> and Schwimmer endeavored to establish it as an angioneurosis due to vasomotor disturbances. In 1876 Lewin, and later Molènes Mahon<sup>21</sup> added primary infection as a cause, to which Vidal and Leloir ascribe certain cases. Ptor ine poisoning or the toxins from faulty metabolism have been assigned an important etiological rôle by Chaisse,<sup>22</sup> Legendre,<sup>23</sup> and Galloway.<sup>24</sup> Cordua<sup>25</sup> and Luzzato<sup>26</sup> found micrococci in the blood, and Haushalter<sup>27</sup> a streptococcus, Leloir<sup>28</sup> both a diplococcus and a streptococcus, while Finger<sup>29</sup> attributed some cases of erythema multiforme to the local effect of bacteria. Later in writing of the cases of erythema nodosum, purpura rheumatica and epidemic zoster, Kaposi<sup>30</sup> says:

1. Certain typical cases which occur annually lead us to infer a miasmatic infection or bacterial origin.

2. Sporadic cases are generally a reflex effect of some anomalous condition of the internal organs, as in amenorrhœa, dysmenorrhœa, uterine displacements, etc. Such cases are pure angioneuroses.

3. Some may be due to autoinfection with toxic substances which have entered the blood as the result of internal disease, such as tuberculosis, nephritis associated with inflammation, suppuration and malassimilation.<sup>31</sup> Besnier and Doyon<sup>32</sup> say: while there may be an infectious element, it is subject to extreme variations and is influenced more by the individual predisposition than by any specific property of the *materies morbi*. It is further evident that erythema multiforme may arise from various causes, but whatever the cause its action is on the vasomotor centers rather than on the skin direct.

In cutaneous hæmorrhages which are so frequently associated with the exudative erythema, Howard<sup>33</sup> has recently demonstrated in a number of cases a diplococcus in the blood which somewhat resembles the pneumococcus although differing from this organism in certain details and corresponding to that previously found in

hæmorrhagic infections by Banti,<sup>34</sup> Babès and Oprescu,<sup>35</sup> and von Dungern.<sup>36</sup>

From the foregoing it is evident that our knowledge of the affection under consideration is in a transitional stage, and any light thrown on it is greatly to be desired. In this connection the following case presents certain striking features:

J. H., male, aged twelve years, with a negative family history, was said to have been a healthy, well developed child at birth. At four months of age he had an abscess in the throat of which the details are unknown, at three years of age he had pneumonia, and at eight diphtheria, in which antitoxin was given. After convalescing from diphtheria, an illness occurred which the mother said was brain fever; she also mentioned what might be malarial fever as occurring about this time.

According to the mother, the child has always been subject to febrile attacks lasting a day or so, during which a slight delirium was often present. Three years ago he visited the Nose and Throat Dispensary at Lakeside Hospital with enlarged tonsils and palpable glands in the neck. Tonsilotomy was advised, but declined. In recent years there have been frequent attacks of tonsilitis. During the year preceding the illness the child had enjoyed unusually good health.

On May 5, 1906, he was struck behind the left ear with a shot from a Flobert rifle. This was dressed at the Surgical Dispensary of Charity Hospital, and no apparent infection followed. May 12, seven days later, he returned complaining of pain in the ankles. Examination revealed both ankles swollen, one red with some increased local heat, and a general temperature of 102° F. Examination otherwise negative. The following day he was seen by an outside physician, called on account of an eruption covering a greater part of the body, and said by the physician to be a simple urticaria. On the following day, May 14, he was seen by Dr. W. H. Merriam, physician at Charity Hospital Dispensary, to whom I am indebted for the notes of the case previous to my examination, who reported him sitting on a chair unable to walk on account of pain in the ankles. At this time the entire body was covered with an erythematous eruption, and about the ankles, which were slightly swollen, was a marked degree of cyanosis. On the neck were a few small bullæ containing a transparent, serous fluid. He was then admitted at Charity Hospital. Temperature on admission was 102. Physical examination was negative with the exception of a slight roughening of the systolic tone at the apex of the heart. Two days later, May 16, the case first came under the observation of the present writer.



The erythema was of a circinate or gyrate variety, with pinkish, apparently elevated margins enclosing a lighter colored central area, best seen on the trunk and adjacent parts of the extremities. In some places, notably on the buttocks and lower extremities, the erythema assumed a darker hue which pressure with a glass slide did not wholly remove. There was also a few petechiæ and a number of bullæ varying in size from two to six cm. in diameter, most abundant on the neck and upper part of the trunk, although no region of the body was wholly exempt.

The subsequent course of the eruption was as follows: From day to day the erythematous patches gradually became bullous, first containing a translucent, serous fluid, which soon took on a cloudy, opaque color, and finally became hæmorrhagic. As the eruption developed, the pain in the joints subsided. On May 23, many of the bullæ had become purulent, and on the evening preceding, the temperature, which from the second day in the hospital had remained about  $99^{\circ}$ , suddenly rose to  $101^{\circ}$ . On this day the bullæ were opened to allow free drainage, and the patient was kept in a mild antiseptic bath. Blood culture was attempted on May 23, but on attempting to pass the needle into the median basilic vein, it was found that the skin was so full of minute vesicles that it would be impossible to obtain a sterile culture. Cultures from both the purulent and hæmorrhagic bullæ gave pure streptococcus growths.

On the afternoon of May 24, the boy developed symptoms of failure and died that night. There was some doubt as to the actual cause of death; it seemed, however, that it might be due to absorption of septic material from the skin lesions, as there was quite a large area of denuded surface.

The post mortem was made by Dr. J. D. Pilcher, pathologist to Charity Hospital, on the following morning. The result of this examination was entirely negative with two exceptions herewith noted. About the spleen were numerous old fibrous adhesions possibly due to one of the earlier infections, perhaps the pneumonia. The gross appearance of the spleen was not at all that of a septicæmia. The structure was more, rather than less, dense than normal. On opening the stomach, an area near the pylorus was discovered with small hæmorrhagic spots. It was suggested that such appearance might have been due to post mortem changes, but the distinct limitations of the area involved in these spots rendered this untenable. Quite close to the cardiac orifice was an area about 3 cm. in diameter which showed denudation of the gastric epithelium.

The histological examination was made by Dr. Oscar T. Schultz of which a synopsis may be given as follows:

The internal organs show nothing further than the changes

previously noted, except that attention should be called to the presence of cloudy swellings in the liver and kidneys.

*Skin Lesions:* The epidermis is entirely absent and the surface of the cutis is covered with a thin layer of necrotic material. The connective tissue fibres beneath this layer have a swollen, opaque, rather hyaline appearance. The blood vessels of the cutis are markedly distended, and the accompanying lymphatics are filled with pus cells. Infiltration by inflammatory cells does not occur in the tissue of the cutis. The chief change in the deeper tissue of the skin is limited to the blood vessels and lymphatics. This change is associated with a loss of epidermis and a superficial necrosis of the cutis. The inflammation is of the exudative type, rather than of a proliferative or infiltrative nature. It is the type of inflammation that is often associated with a vascular and lymphatic localization of the streptococcus.

Examination for bacteria shows numerous Gram positive cocci, usually arranged in pairs, in the superficial necrotic zone. Since bacteriological examination of the fluid of the bullæ gave pure cultures of streptococci, one is safe in asserting that the cocci seen in sections are of the same species. Occasional cocci are seen in the deeper tissue spaces. Here and there one can see a coccus in a dilated blood vessel. And in a lymphatic filled with pus cells cocci are fairly numerous. In a number of the distended blood vessels fibrin is present and the vessels are apparently thrombosed.

From the histological findings there are two possible deductions.

1. That the inflammation of the skin is entirely independent of the gun-shot wound, and is due to a primary infection of the skin by the streptococcus.

2. That infection by the streptococcus occurred by way of the wound, that the skin inflammation is secondary to such an infection, and that the case is one of generalized infection with particular localization of the organisms in the skin.

The second possibility seems much the more probable for the following reasons:

1. The involvement of the skin is so general as to preclude an infection of the skin from without and a spread of the inflammation in the skin from a primary point of skin infection.

2. The involvement of the deeper vessels of the cutis would indicate an infection of the skin by way of the general circulation.

3. The superficial exudation and loss of epidermis seem to be secondary to the vascular involvement.

4. It is known that generalized infection, particularly by very

virulent strains of streptococcus can occur without very marked changes at the point of entry. Death may result rapidly, due to localization of the organisms at some point widely removed from this portal, or death may occur even before there is time for a reaction on the part of the tissue elsewhere. Examples are not wanting of a generalized infection by way of the peritoneum without any apparent peritoneal involvement, and also infection by way of the pregnant uterus.

5. The gun-shot wound offered an ideal portal of entry.

For the reasons given above it would seem that the case ought to be grouped with those exudative inflammations of the skin in which the skin involvement is secondary to and part of a generalized infection.

I conceive, the report continues, the mechanism in the production of the bullæ to be as follows: Marked exudation due to vascular dilatation, the dilatation being caused by the action of the inflammatory agent upon the blood vessels. Interference with the drainage of the exuded fluid, because of a filling up of lymphatics by inflammatory cells and because of thrombosis of some of the veins. Necrosis of the epidermis following the exudation and the production of bullæ.

In conclusion: While the case from a clinical view point is comparatively infrequent, it is by no means unknown as the cases reported by Sherwell,<sup>37</sup> Osler, Galloway,<sup>38</sup> Blair,<sup>39</sup> King Brown<sup>40</sup> and others affirm. Neither are cases wanting in which an erythematous eruption followed by the formation of bullæ, hæmorrhage and death, occurring soon after and attributed to some local disturbance or traumatism. In this group the cases of Crocker,<sup>41</sup> Welander,<sup>42</sup> Norman Walker,<sup>43</sup> Crawford<sup>44</sup> and others belong. Again, somewhat allied, may be the bullous dermatoses of Howe<sup>45</sup> after vaccination, Bowen<sup>46</sup> associated with foot and mouth disease in cattle, and the series of cases, mostly in butchers, reported by Pernet.<sup>47</sup> It is distinctive, however, in owing its possible origin to a gun-shot wound, and the histological findings seem to warrant its being classed as a streptococcus infection. Clinically it answers to what is now understood as erythema exudativum multiforme.

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## NOTE ON A CASE OF SARCOID.

By S. POLLITZER, M. D., New York.

Read before the Sixth International Dermatological Congress, New York, September 9-14, 1907.

SINCE the first publication by Professor Boeck, of Christiania, describing a new disease under the title of multiple benign sarcoid of the skin, the observations of that disease have multiplied to a sufficient extent to show that the condition is not one of such rare occurrence as its late discovery would seem to indicate. So, for instance, in his latest publication on the subject, Boeck is able to record ten personal cases, while in France, counting in the subcutaneous variety of the same disease described by Darier, nearly as many cases have been noted. Publications on this subject, however, from other countries—Germany, Austria, Italy, America, etc.—have recorded very few cases, or have been wanting altogether. It would seem unlikely that the disease is so much more frequent in Norway and in France than in other parts of the world, and it is reasonable to attribute the paucity of the reports to a lack of acquaintance with the disease. From this point of view alone my case would be worth noting; it appears to me particularly to merit a record, because it presents some unusual features.

The patient, a married woman, thirty-five years old, is well nourished and healthy looking; but when she first consulted me she had just returned to New York after a prolonged residence in a sanatorium in the Adirondack Mountains, where she had gone on account of a tuberculosis pulmonum, which had advanced to the formation of a large cavity in the right lung. The cutaneous affection began about five years ago with the sudden appearance of bright and dull red, round or oval, slightly elevated areas from 5 to 20 mm. in diameter, with flat normal surfaces and sharply defined border; no subjective sensations. On palpation these plaques give the impression of moderately firm infiltrations in the cutis, which is freely movable over the subcutaneous tissues. From their first appearance to the present time they have remained practically unchanged, except that during the first weeks after their occurrence many of them in-

creased slightly in area. New patches, however, have appeared from time to time up to six months ago, since when there has been no fresh eruption. The plaques are located in the face, forehead, cheeks and nose, the neck, shoulders, the left arm, both forearms and wrists, the abdomen and the right leg. In their distribution they show only an indifferent symmetry and no predilection for either the flexor or the extensor surface; so, for instance, at the right elbow there are two small patches on the flexor and two on the extensor side. There are in all about twenty-five lesions, and except one near the umbilicus and one on the right leg above the ankle, they are all located on the face and upper extremities. At the tip of the nose and on the alæ there is a group of five small lesions from 3 to 8 mm. in diameter which lately have shown a tendency to coalesce. The lesions in the face assume a bluish hue when the patient is exposed to the cold or has a spasm of coughing. Three of the larger plaques—one on the forehead, one on the left arm, one on the left wrist—show near their center a hemispherical prominence about 4 mm. in diameter, in appearance and to touch suggesting a soft mole (*verruca mollis*). None of the lesions show any scaling, none have shown any sign of atrophy; the inguinal and axillary glands are not notably enlarged, a blood count yielded nothing of interest.

In the diagnosis of the case lupus erythematosus, sarcoma and pernio were considered, but only to be rejected; and it was only after making histopathological studies and advising with Dr. Darier of Paris (to whom I desire here to express my obligations) that it became clear that we were dealing with a variety of Boeck's sarcoid. From this disease, however, my case differs in the following particulars:

The color of the lesions is bluish or brownish red rather than yellowish brown; there is no scaling, no central depression, no network of the dilated capillaries, and the very irregular outline with narrow raised yellowish border is absent; there are no yellowish pin-head lichenoid papules; there are no large packets of lymph-nodes.

The study of an excised plaque shows the lesions, however, to be identical in structure with the sarcoid of Boeck. This has been described so well by Boeck, and especially by Darier, that I shall pass over it briefly. The sections show larger and smaller cell masses, round or irregular in outline, lying in the cutis, which is characteristically free from any signs of reaction. These cell-masses are scattered through the cutis from the border of the subcutaneous fat up to the sub-papillary layer. In Boeck's cases much more massive cell

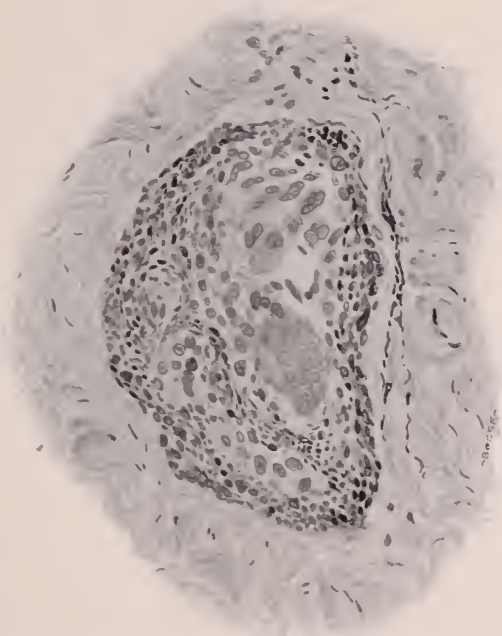


FIG. 1. SARCOID:—A sharply circumscribed "Tubercle" in middle cutis, showing giant, epithelioid, and lymphoid cells.

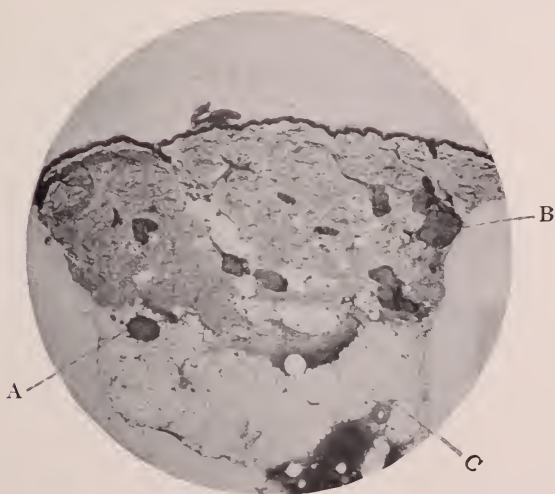


FIG. 2a.





aggregations are described than occur in my case, and they are located, as a rule, rather high in the upper layers of the cutis. I find these cell masses in relation to the larger vessels occupying a peculiar position; they are usually located on one side of the vessel, seldom surrounding it. In detail these cell masses consist of epithelioid and lymphoid cells, with a few giant cells. (Fig. 1.) Many of the smaller masses present a picture strikingly like that of tubercle, so that one can realize the force of Darier's statement, that if this be not tubercular tissue, he would not know what to call it. And yet the most careful search for tubercle bacilli yielded no result, and injections of a suspension of a large part of the excised plaque into the peritoneal cavity of three guinea pigs provoked no tuberculosis in them.\*

For the purpose of determining the mutual relations of the cell masses in the cutis a portion of the excised plaque was cut in serial sections. I show you here three views (Fig. 2, a, b, c), approximately from the beginning, middle and end of the series. The small oval infiltration at the subcutaneous border on the left of the first section may be traced obliquely across the field in the successive sections till it merges into the larger mass of cells in the upper cutis on the right. Similarly, the small infiltration near a large vessel in the sub-cutis on the right of the second section gradually passes up to unite with the same mass above it. It seems to me likely, therefore, that all the various round, oval, or irregular masses of cells which constitute the new tissue, widely scattered as they appear throughout the cutis, are simply irregular ramifications of one extensive infiltration shaped like the twisted and gnarled root of an old tree with its fantastic tuberosities and outrunning branches.

We are in the habit of regarding a tubercle as an approximately spherical mass. I am in some doubt as to the bearing which the peculiar shape of the irregular infiltration I have described will have on the theory of the relation of the cutaneous process to a distant tubercular focus. A large number of these cases of sarcoid present evidences of tuberculosis, or at least respond positively to the tuberculine test. You are aware that Boeck has accepted the identity of his sarcoid with the disease described by Darier as *lupoide en disques*, and has agreed with him in regarding it as a tuberculide.

To sum up the points of this brief communication, we have:

1. A case presenting clinically the essential features of Boeck's sarcoid, but differing in some notable respects, occurring in a woman highly tubercular.

\* The histological work in this case was done in the Pathological Laboratory of the Mt. Sinai Hospital; the animal experiments in the Research Laboratory of the N. Y. Department of Health.

2. Histologically the case presents a picture almost identical with Boeck's sarcoid and Darier's subcutaneous sarcoid, but differing from the former in extending quite uniformly throughout the entire cutis, and from the latter in its virtual absence from the subcutis; in this respect it may be described as an intermediary form.

3. The cell-masses on section strikingly resemble tubercle, but the various sections appear to be different parts of a single, or, at most, a few widespread irregular infiltrations, for the most part following the blood-vessels. Tuberculosis is excluded by the absence of bacilli and the result of experimental inoculations.

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### MULTIPLE BENIGN CYSTIC EPITHELIOMA.

BY M. L. HEIDINGSFELD, M. D., Cincinnati, Dermatologist to the City Hospital of Cincinnati.

Read before the Sixth International Dermatological Congress, New York, September 9-14, 1907.

THE subject of multiple benign dermatologic new-growths is enveloped with considerable more haze than the long line of careful clinical observations, and pathologic investigations seemingly warrant. This haze which was notably absent from Kaposi's earliest classical description of lymphangioma tuberosum multiplex in 1892 has materially increased with the successive investigations of Jacquet and Darier on hydradénomes éruptifs; Török, on syringo-cystadenom; Brooks, on epithelioma adenoides cysticum; Fordyce on multiple benign cystic epithelioma; Balzer and Menetrier adenoma sébacés; Pringle adenoma sebaceum, etc. This haze at least in a measure has been doubtless due to over-attention to minor clinical and pathological details, and has resulted in overwhelming this class of dermatologic affection with a mass of complexing synonyms.

From the earliest there has been a constant conflict of opinion among those in authority as to whether the cases thus far reported can be consistently divided into a number of distinct groups or collected with greater propriety and convenience into a single class. The three principal groups into which most of the cases have been readily placed are (1) Multiple benign cystic epithelioma, (2) Lymphangioma tuberosum multiplex, (3) Adenoma sebaceum, to which a possible fourth can be added, (4) Linear nævi. The clinical characteristics of these various groups have been sufficiently long and well established to permit their ready recognition, and in themselves

require but little comment. In multiple benign cystic epithelioma the lesions are usually small, pin-head to split-pea in size, glistening, translucent in appearance, yellowish, pinkish or bluish white in color, rarely ulcerated, but sometimes centrally depressed, situated for the most part on the face, principally at the root of the nose, cheeks, forehead, ears and chin, bilaterally symmetrical, but grouped. The cases are mostly hereditary, females, develop at puberty, and consist pathologically of masses of epidermal origin of irregular interlacing epithelial strands, broad angular in outline, giving off smaller strands, and interspersed with oval or roundish cysts containing colloid or cornified epithelium. The nodules develop slowly and after attaining a moderate development usually remain stationary in size. The lesions in adenoma sebaceum are very similar to those in multiple benign cystic epithelioma, but are usually more symmetrical in distribution, and reddish brown in color. The pathologic change is usually a hyperplasia of the sebaceous glands, which is by no means constant, as will be referred to later. Lymphangioma tuberosum multiplex is characterized by small roundish or oval lesions, pin-head to a split-pea or larger in size, firmly imbedded in the cutis and slightly elevated above the surface, irregularly but bilaterally distributed over the anterior aspect of the thorax and the fossa of the neck. Pathologically they are mostly endothelial in character, derived from lymph and blood vessels. Linear nævi, when linear in distribution, and unilateral in character are readily recognizable and require no special clinical comment, but when they occur in the form of multiple bilaterally distributed, discrete lesions, with a distribution analogous to the affections already enumerated, they can present clinical and pathological features difficult of differentiation.

All these groups present many common clinical and pathological characteristics. Most authorities concede to them an embryonic congenital origin from misplaced epithelial tissue. Most of them are stimulated by puberty to their greatest degree of new growth and development. The pathologic findings in each group are exceedingly varied, but group compared with group, possess much in common. They often present common clinical characteristics in size, color, stability, distribution of the lesions, and their hereditary and painless character. Their common though infrequent change to malignancy has also been noted. Most authors while still maintaining separate groups for certain clinical considerations, are frank to admit that they possess much in common to permit a unification and simplification of this particular class of dermatologic cases. Crocker <sup>1</sup> (p.

984), who is a strong advocate for the division of these cases into separate groups is frank to admit that multiple benign cystic epithelioma, lymphangioma tuberosum multiplex and adenoma sebaceum, possess many common characteristic traits; that certain clinical features which serve to distinguish them from each other possess merely relative value; that the microscope must often decide, and the pathology still awaits more common and general agreement.

Wilhelm in presenting a case to the Vienna Dermatological Society stated that "lymphangioma tuberosum multiplex is variously diagnosed as hydra-adenoma, hemangio-endothelioma, syringocystadenoma, etc., according to the pathogenesis from gland, blood or lymph vessel of the skin as determined by microscopical examination."

Dorst and Delbanco report a case of linear nævus which they desire to class with multiple benign cystic epithelioma, and Gottheil, among many others in the literature, reports an apparent case from its clinical aspects of nævus linearis or white mole of the scalp as an adenoma sebaceum.

#### REPORT OF CASES

G. C. G., aged sixty-five, came to my attention for the first time March 6, 1905. The nose (Fig. 1.) was the site of about seventy-five small rounded or slightly pedunculated new growths, varying from pin-head to a split-pea or slightly larger in size, reddish yellow in color, imbedded in the cutis, non-sensitive to touch and painless to pressure, and situated mostly on each ala and the root of the nose. A number of smaller lesions were distributed over the forehead in

<sup>1</sup> Crocker states "that these cases (Multiple benign cystic epithelioma) resemble adenoma when abundant. The distribution and aggregation may be exactly like adenoma sebaceum, except on the forehead, where the growths are sparse in adenoma sebaceum, while in the other they are closely grouped for the most part. . . . In a few cases when the growths are sparse, the microscope would have to decide the question." In writing of lymphangioma tuberosum multiplex he states (p. 978), "Kaposi was the first to describe a case of this rare disease from Hebra's clinic, and the name he gave it stands at the head of this article on the score of priority, but not as representing the true nature of the growths, as it is worse than useless to change it until more general agreement is obtained regarding the pathology of this affection, than the farrago of synonyms indicates to be now the case." Again in a report to the London Clinical Society, he pleads for the separation of multiple benign cystic epithelioma and lymphangioma tuberosum multiplex, in spite of their many common characteristics, and in addition to a number of clinical and pathological differences of a relative nature, that the former is not hereditary and females predominate largely with the latter. In my own case of lymphangioma tuberosum multiplex herewith reported, the son inherited the condition from his mother, and in five cases of multiple benign cystic epithelioma, the father shared the affection with his two sons and two daughters.



PLATE IV—To Illustrate Dr. M. L. Heidingsfeld's Article.



FIG. 1.



FIG. 2.



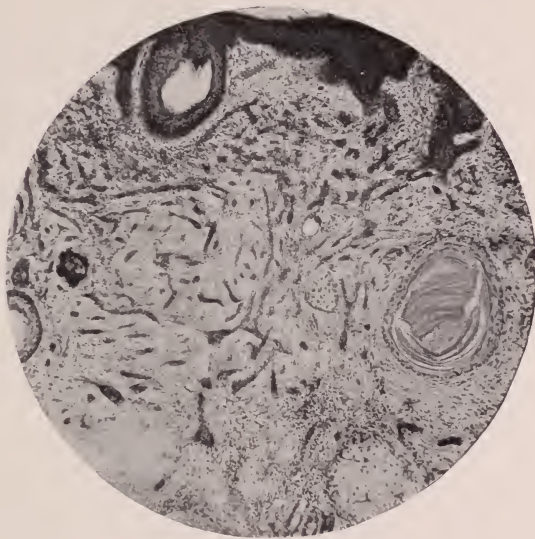


FIG. 3.

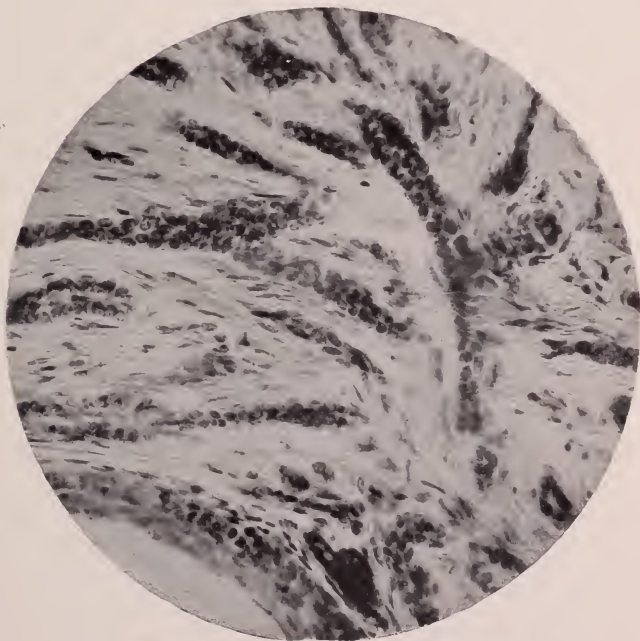


FIG. 4.







FIG. 5.



FIG. 6.



front and behind the ears, and over the chin. The tip of the nose, and the cutaneous surface of the septum were also the site of the lesions. There was no evidence of ulceration or active inflammation. Patient stated that the lesions first manifested themselves when he was about thirty years of age, and that they have steadily but slowly increased in size and multiplied in number. There was no history of any similar condition on his father's side of the family. His mother to his personal knowledge was free from the affection, but died before she reached the age of thirty. An uncle and an aunt on his mother's side of the family were similarly afflicted, and all of his children, two sons, aged thirty-four and thirty years respectively, and two daughters, aged thirty-eight and thirty-six years respectively, evidence the marked hereditary character of the affection. I am able to add my personal confirmation to the inherited traits in three of the children, and they show the same clinical and some of the pathological characteristics of the father. The affection began in all of the children on the nose, when they were from twenty-five to thirty years of age, and although the lesions at the present time are considerably smaller in size, varying from a pin-head to a good sized shot, they have the same distribution as that of the father, except in the second oldest daughter, the neck is also involved and the lesions show the same clinical and physical characteristics. The most striking feature of the cases is the fact that while nearly all the cases reported in the literature have occurred in females, in this instance four males and only three females were afflicted. These cases from three of whom, father, one son and one daughter, lesions were excised for histological examination, together with five other cases of multiple benign cystic epithelioma, form the basis of the pathologic investigation of this report. In one of the five remaining cases, Mr. B. P. M. (Fig. 2), aged sixty-five, the lesions were multiple, fifteen to twenty in number, glistening, translucent, yellowish white in appearance, some centrally depressed and situated underneath each eye, over the forehead, cheeks and chin. There was no progeny in this case and a history of heredity was unobtainable.

The microscopic examination revealed an abundance of interlacing epithelial strands and cysts. In the remaining cases the lesions presented the characteristic clinical appearance of multiple benign cystic epithelioma, but they were for the most part single and discrete, or consisted of a small group situated over a limited area of the face. All showed among other pathologic changes interlacing epithelial strands and colloid cysts. To these cases is added for comparative study a case of lymphangioma tuberosum multiplex of Kaposi in:

P. A. H., a full blood negro, aged twenty-five years, whose

anterior aspect of the thorax in a triangular area bounded by the nipples and the umbilicus, is studded by several hundred smooth rounded lesions, varying from a pin-head to a split-pea or larger in size, slightly elevated above the level of the surrounding skin, well imbedded in the cutis, more or less oblong in outline, with the long diameter running transversely with the long axis of the body. A group of about fifty of these lesions is situated above the clavicles and over the hollow of the neck, and four or five small lesions are over the left scapula. A few lesions have undergone an apparent spontaneous ulceration, and are the site of faint depressed cicatrices. The condition has been present as long as the patient can distinctly remember; but the lesions have slowly and steadily increased in size and number. Subjective symptoms have been uniformly absent. Patient who is married but without progeny states that his mother is similarly affected, but he has no personal knowledge of any other hereditary influences. The most striking clinical feature of this case, is the occurrence of the affection in the negro, the first to be recorded in that race, as far as my personal knowledge permits me to state, and its hereditary character, which is strongly denied by some authors. For further comparative study, is added a case of a rapidly growing hairy pigmented mole upon the chin of a young man, W. H. N., aged twenty-one, which took on active development at the age of puberty and showed upon histological examination some peculiar embryonic features. Finally, I wish to add a case which was diagnosed by its clinical features as adenoma sebaceum, and presented as such in Pusey's text book (Fig. 286, p. 866, 1907), Miss M. B., aged twenty-seven. This case was observed some seven years ago, into which a history of heredity was not inquired, and a diagnosis of multiple benign cystic epithelioma was not suspected. The patient has since passed from my personal observation, but personal recollection leads me to believe that a differentiation of these two affections in this case, without a well defined clinical history or a pathologic examination, would be difficult to effect.

#### PATHOLOGY.

The most striking, constant and characteristic pathological change in multiple benign cystic epithelioma (Fig. 3), is the well recognized and oft described interlacing epithelial strands, consisting of two rows of large oval nucleated epithelial cells here and there irregularly dilated by an apparent endothelial proliferation. These strands have a very irregular distribution, for the most parallel with or vertical to the surface of the skin. They possess many short bifurcations, and are of short irregular lengths (Fig. 4). Occasionally they are short, and usually broad, and end in three or more



short tail-like processes which gives them a peculiar stellate appearance. They are most freely distributed in the upper portion of the derma, near the papillæ, but often extend in greater or less degree into the lower depths of the cutis to the layer of subcutaneous fat. Their identity with the ducts or glands proper of embryonic misplaced or imperfectly developed sweat glands, has been often considered, but is a question to which I can add from my personal observations neither refutation nor confirmation. Sometimes, in the larger, longer-standing and more rapidly developing lesions, I have observed these bands to be unusually broad, and irregular in outline, containing masses of actively proliferating epithelium, with tongue-like processes extending from the borders, imparting to them a spread-tail-like appearance. In addition to these strands, there are a number of irregularly distributed round or oval cysts of varying size, with an epithelial wall of several or more layers of cells, with the contents mechanically removed or consisting of more or less concentrically arranged stratified epithelium or colloid material. In addition to these two usually most important changes, there is, as a rule, a secondary change in some other tissue element—a hyperplasia of the hair-follicles, connective tissue, sebaceous or sudoriferous glands, which is more or less constant for the lesions of each case. These features pertain principally to smaller lesions; in the larger, longer standing, more actively growing lesions, the original secondary hyperplasia assumes the primary rôle, and the adenoma sebaceum, sudoriparum, pili, etc., completely or incompletely overshadows the other pathologic changes. In the first group of cases, the father showed a marked hyperplasia of the hair-follicles in addition to the other characteristic changes. These structures were not only markedly increased in depth, circumference, and stratified contents, but gave off very peculiar-looking, single, occasionally branched horn-like processes. (This pathologic change has also been noted by Fordyce; p. 467.) The most striking pathologic change in the son's case was a marked proliferation of the connective tissue from masses of embryonic-looking cells. In the daughter's case, the chief secondary change was a marked hyperplasia of the sebaceous glands, which in the larger lesions resembled an adenoma sebaceum. This feature was also very marked in one of the cases where the lesions were few in number and circumscribed in area.

The chief pathological change in the remaining cases is a very marked adenomatous hyperplasia of what apparently were original sweat glands, or possibly the interlacing strands of epithelial tissue,

which characterizes the condition. This adenomatous tissue is made up of large, rounded irregular masses, consisting of two or more rows of epithelial cells, arranged in columns, interlacing and closely grouped with more or less polygonal interstices of almost uniform size and distribution, corresponding to the cystic dilatation frequently observed in pathologically changed sweat glands and so-called cylindromata cutis. They are surrounded by a thin mesh-work of connective tissue, extending almost to the surface of the skin, and situated for the most part in the upper layers of the cutis. In many of the cases the interstices are longitudinally extended toward the surface, near the center of the adenomatous tissue, as if they corresponded or were derived chiefly from the ducts of the original glands. The cells showed active mitotic changes and extensive proliferation, particularly around the external portions of the adenoma, so that the borders of the larger lesions seem to be made up of a mass of conglomerate cells, devoid of any particular arrangement. In two of these cases, in addition to this change mentioned, the hair follicles in the immediate neighborhood show very extensive hypertrophic changes, so that they were many times increased in length and breadth, with their borders distinctly lobulated. In a few instances the central portion of the hair follicle corresponding to the site of the original hair was filled with a mass of epithelial debris, consisting of degenerated imperfectly keratinized and stratified epithelium. In others this area showed merely a clear space, indicating that the soft material had been mechanically removed by the knife on sectioning or had fallen away in the preparation of the specimen. The case of lymphangioma tuberosum multiplex showed a very peculiar anomalous condition, the analogy of which I have been unable to find in the literature, with the possible exception of Pollitzer's case, reported in the *Journal of Cutaneous Diseases* (vol. IX, p. 281). The lesions consisted of cysts surrounded by a wall of loose connective tissue and lined with a number of layers of epithelial cells. The larger cysts could not be hardened or sectioned with any satisfaction, the contents being mechanically removed with the knife on sectioning or falling away in the preparation of the specimen. The smallest lesions, pin-head in size, showed the cysts to be filled with a mass of degenerated, cheesy-looking epithelial debris and a large amount of small lanugo hairs, concentrically arranged in the form of locks. The lesions bear pathologic analogy to the dermoid cyst of the ovary, and in the absence of any evidence of hair follicles in the immediate neighbor-

hood of the lesions, they give strong evidence of their embryological derivation from misplaced epithelial tissue from the epiblast. All the lesions which could be sectioned with any satisfaction, and some fifteen or twenty were examined, showed identically the same change. None of the lesions gave any evidence of having been derived from the endothelium from the lymph or blood-vessels, and therefore this case of lymphangioma tuberosum multiplex is unique in its pathological character compared with those already reported in the literature. The case of pigmented hairy mole showed also a very anomalous and unusual pathological condition. On sectioning, it was noted that the knife encountered some extremely hard substance, which was at first thought to be calcareous material. Two microtome knives were practically ruined in obtaining very imperfect specimens from this case. While the sections were being cut, a number of very small, poppy-seed-size glistening bodies could be observed lying free upon the specimens and knife-blade, and a number were picked out from the gross specimen by means of a pair of tweezers. Examination of these bodies showed that they consisted of rounded masses of concentrically arranged laminated bone, which contained typical Haversian canals and bone cells. Under the microscope the tissue, in addition to the characteristic appearance of the ordinary piliferous pigmented mole, showed a number of these bony nodules situated in the lower layers of the cutis above the subcutaneous layer of connective tissue and fat. The specimens also showed a number of cavities from which these bony structures had been mechanically removed by the knife. This case is, therefore, classed with a very rare condition encountered in the literature, osteoma cutis, and gives additional evidence of the embryological development of some of these new growths from misplaced tissue, which in this instance must have been derived from mesoblast. (This and the preceding case will each form the basis for a subsequent report.)

#### GENERAL OBSERVATIONS AND DEDUCTIONS.

It is evident, therefore, that multiple benign cystic epithelioma, in common with lymphangioma tuberosum multiplex, adenoma sebaceum, and some of the forms of linear nævus present many clinical and pathological variations within these respective groups, and are sufficiently common to each other to materially prevent a sharp differentiation of these commonly considered dermatologic entities. Their development from embryonic misplaced epithelial or endothelial tissue is almost universally conceded to be one great point of



common resemblance, which should serve as a strong nucleus around which to gather other common traits for the elimination of any arbitrary division of these affections. Crocker, who has already been quoted as an advocate for the separation of these affections, states (p. 988) that adenoma sebaceum "is presumably an error of development in the shape of a congenital overgrowth of an adenomatous character developing from embryonic remnants in the skin, but in my experience affecting all the appendages, and therefore really a pilo-sebaceous hidradenoma." Again he states: "The two diseases (multiple benign cystic epithelioma and adenoma sebaceum) resemble each other. Indeed it would not be surprising if both these affections would turn out to be slightly different clinical expressions of the same pathological process." Walter Pick states that the clinical variations are marked, but the histological picture is so characteristic and marked as to permit both the diagnosis and differential diagnosis. A survey of some of the cases in the literature will readily reveal some marked clinical and pathological variations. Brooke's, Fordyce's, Fellander's, and Balzer's cases resembled clinically adenoma sebaceum. Derivation from the sweat glands was noted in the cases of Brooke, Darier, and Török; from sebaceous glands, by Pick and Balzer; from all the various structures, by White, Fordyce, Wolters, and Fellander; from hair follicles, by Jarisch; from the epidermis, by Csillag. Krzysztalowicz states that the pathology of adenoma sebaceum consists of a proliferation of all organs and tissues of the skin in the most varied combination. He objects to its nomenclature and, together with Leredde, Pezzoli, Jadassohn, Dohi, Möller, Winkler, and many others, classes the affection with the nævi. Reitmann reports a case of adenoma sebaceum in which the chief pathological change was a connective tissue hypertrophy poor in cells, rich in vessels, to which he attributed an embryonic development. Thin reports a case that was clinically a lymphangioma tuberosum multiplex, in which the lesions were derived from the normal sweat glands, which showed endothelial proliferation and cystic dilatation. Neumann, Blaschko, Unna, Philippson, Quinquaud, Török, share this same view in regard to the origin of their cases of lymphangioma tuberosum multiplex. Kaposi, Lesser, Kromayer, attribute the origin of their cases to lymph vessels; Wolters, Guth, Elsching, Jarisch, to blood-vessels, and Jacquet and Darier, to misplaced embryonic epithelial cells. The subject cannot be dismissed without consideration of the relation of these cases to malignancy. This feature has already received careful clinical impress at the hands of White and



Jarisch in the presentation of cases with ulcerative changes not far removed from those observed in malignancy, and with the comment that these cases have been observed and recognized too short a time to permit as yet a proper estimate of their terminal course. Fordyce has presented a very careful pathologic report of the affection and has recorded the striking analogy which exists in the pathology of these two affections. My personal observations in the pathology of multiple benign cystic epithelioma are a confirmation of those of Fordyce and I am frank to state that the advanced lesions of multiple benign cystic epithelioma not only show evidence of malignant change, but I have been able to find a parallel for them in every pathologic phase and form in the clinical lesions of early or pre-malignant change in the skin. This leads me to believe that malignancy, aside from prolonged irritating influences, has its focus in embryonic misplaced tissue, which is further confirmed by the oft-observed multiple excoriations, keratoses, and secondary ulcerations in malignancy of the skin, which are prone to take on the same malignant changes as the primary lesions, particularly if the latter are removed or favorably influenced by treatment.

#### CONCLUSIONS.

1. Multiple benign cystic epithelioma presents many clinical and pathological variations common to those of adenoma sebaceum, lymphangioma tuberosum multiplex, and some of the forms of nævus with discrete bilaterally distributed lesions.

2. All these enumerated affections present a common pathogenesis from misplaced embryonic tissue; their individual pathology and clinical characteristics are exceedingly varied, but common to each other.

3. The terms multiple benign cystic epithelioma, lymphangioma tuberosum multiplex and adenoma sebaceum, or their numerous and varied synonyms, are not appropriate to the clinical and pathologic character of these affections. In view of their common pathogenesis and the close alliance of many of their clinical and pathological characteristics, these affections, to avoid any arbitrary reduplication and unnecessary redundancy in nomenclature, should be conveniently grouped into one class.

4. The pathology of each of these so-termed separate types of dermatologic affection embraces the hypertrophy of all the glandular elements and all the tissues of the skin in the most varied form and combination, and precludes the use of pathologic descriptive

terms in the nomenclature. In view of their common embryonic derivation, and the multiple discrete papular disseminated character of the lesions, an appropriate and generic nomenclature would be "Multiple Disseminated Embryonic Lichenoid Eruptions of the Skin."

5. Careful consideration should be given to the analogy which this class of affections bears to the clinical and pathologic changes of early malignancy, and to what extent malignancy owes its origin to lesions whose presence are due to the errors of embryonic development.

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## DESCRIPTION OF PLATES.

- Fig. 1.—Multiple benign cystic epithelioma. A maternal aunt and uncle, two sons and two daughters similarly affected. The lesions developed in all the cases at the age of twenty-five to thirty years, and are distributed mostly on the nose. (Clinical type of the first class of cases).
- Fig. 2.—Multiple benign cystic epithelioma. Showing a number of glistening, translucent lesions, some centrally depressed. (Clinical type of the second class of cases.)
- Fig. 3.—Multiple benign cystic epithelioma, showing many short interlacing epithelial strands in the upper layer of the cutis, with a distribution for the most part parallel and vertical to the surface of the skin. The specimen also shows a cyst filled with colloid substance, several without contents, and a few remnants of sebaceous glands. This is the most common and striking form of pathological change in multiple benign cystic epithelioma, but is not constant enough to possess characteristic and pathognomonic value.
- Fig. 4.—Epithelial strands of Fig. 3, more strongly magnified, showing their parallel and vertical distribution, angular outline, bifurcating and stellate character. The strands consist of two or more rows of epithelial cells. At the bottom, the wall of an empty cyst can be readily seen.
- Fig. 5.—Chief pathologic change in the lesions obtained from the father in the first group of cases. Hair follicle in circumference and stratified contents, giving off peculiar-looking horn-like processes, single or branched in character.
- Fig. 6.—Showing characteristic cysts and adenoma of sebaceous glands.

## EASY AND RAPID METHOD OF MICRO-CHEMICAL RESEARCH FOR MERCURY IN THE URINE.

By Dr. C. LOMBARDO.

Read before the Sixth International Dermatological Congress, New York, September 9-14, 1907.

THE methods to ascertain the presence of mercury in the urine proposed by many authors are very numerous, but so far none of them has the character of practicality and rapidity sufficient to be employed in the laboratories of clinics, where delicate apparatus and special chemical knowledge are usually lacking.

These requirements, to my belief, are attained by the method which I am proposing.

It is based:

First—On the fact that the mercury is found in the urine of individuals subjected to mercurial treatment, as a compound not yet well defined, which reacts to the chloride of tin, which reduces it to metallic mercury even in minute quantities, and can be recognized under the microscope.

Second—That the reaction of chloride of tin on the solution of the mercurial salts, and of their compounds with the albumins, which can be perceived macroscopically in solutions at the utmost of 1x50,000, can by adding traces of albumin, and by using the centrifuge, be perceived in solutions much more diluted. By the microscope mercury globules can be seen one-half and one-quarter in one million, just as it is found in the urine.

The method is as follows:

In a tube of the centrifuge are poured five cubic centimeters of the urine to be examined, after having been filtered (preferably immediately after micturition); one drop of albumen of an egg is added and then agitated, to this is added three cubic centimeters of 12% solution of chloride of tin, filtered at the moment of using and hyperacidified with 25% of hydrochloric acid.

The urine at first shows turbidity, then becomes clear, finally opalescent from the tardy coagulation of the albumen; then the specimen is centrifuged for a few minutes. The fluid is removed and the precipitate at the bottom is taken with a pipette, and placed on a glass slide and covered with a coverglass, and examined under the microscope with a power of 600 diameters.

If the urine contains mercury, this is found in the precipitate in the form of extremely minute black globules of metallic mercury.

It is advisable to make the reaction of comparison with normal urine.

If larger quantities of urine are used, then on the obtained precipitate can be practiced the chemical reactions proper for mercury.

The method can be carried out in a few minutes and is just as sensitive as other methods much more complicated.



## SOCIETY TRANSACTIONS.

### CHICAGO DERMATOLOGICAL SOCIETY.

MEETING OF OCTOBER 25, 1907.

DR. FRANK H. MONTGOMERY, Chairman.

Two cases of Leprosy were shown by Dr. JAMES NEVINS HYDE. The first, B. F., a man twenty-nine years old, had been under observation since 1903, and was shown to the Society on February 25, 1903, as reported in the *JOURNAL OF CUTANEOUS DISEASES* for April, 1905. As supplementary to that report it may be said that he was born in Coddington, New South Wales, Australia; left that country in 1896 to become a sailor; was two and one-half years before the mast, during which time he visited Liverpool, London, Norway, Bergen, Gottenberg, Isle of Ceylon, Bombay, Penang, Singapore, Alexandria, Yokohama, Nangasaka, Hong Kong, Shanghai, Genoa, and the West Indies. At one time during his life as sailor he was associated for nine months with a man supposed to have leprosy. His contact with him was not especially intimate; they slept in the same cabin, but in different bunks, and occasionally clothing was interchanged between them. He came to America in 1900 and lived for two months in New Orleans. At the time of leaving Australia, a "patch" was present on the back, though he could not tell when it began. Leprosy is prevalent in the region from whence he came, there being an asylum for lepers at Coddington.

Some changes have taken place since the former demonstration. In 1904, new areas appeared upon the legs, arms, and shoulders; in November, 1906, the hands and feet were much swollen and quite painful; the pigmentation of the areas of trunk and limbs was becoming diffused; the face was more infiltrated and leonine in appearance. In August of the present year he suffered from an attack of dermatitis venenata. At present the infiltration in the face is marked, his color is a dark reddish-brown; the alteration in pigment of the body is diffuse; there is an ulcer upon the right ankle, which persistently refuses to heal.

The second case of Leprosy shown was in a man twenty-six years old, born in Russia, near the city of Riga. He came to this country ten years ago, has been married nine years, and has two healthy children. He was led to seek medical attention because of a dermatitis (supposed) of the face, which he stated had been present six months. Otherwise, he complained of no symptoms. His work is that of handling scrap iron.

The patient is of medium stature, rather spare, of relatively low intelligence, and appears much older than the age given. The face is heavy, leonine in appearance, with infiltration about the brows, ear, and

lips. The general color of the face is reddish-brown. Hands and fingers are swollen; the skin of the dorsi of hands is glossy and marked with bluish mottling. The arms, particularly the ulnar surface of the forearms and posterior surface of the arms, show numerous macules, reddish-brown in color, some of them slightly raised. The back shows many rather small areas of brownish pigmentation with numerous small white vitiliginous areas in the upper part; pigmented areas are present upon the legs; the skin over the right patella is considerably puffed; a large delicate scar is seen on upper part of the right calf posteriorly. There is but little change in sensibility; response to pain seems to be reduced over ulnar regions of the forearms. The roof of the mouth shows several raised areas and a scraping from one of these was found to be loaded with the characteristic bacilli. The nerve trunks in the neck and arms are palpable.

**Case of Tuberculosis of the Skin (?).** Presented by Dr. FISCHKIN.

Man, fifty-five years old, shows the following lesions. (a) On right cheek in the median line, about two inches above upper jaw an oval sore about one inch and a half by one inch in size, the basis of which clearly shows a tubercular character. The sore is of 8 years' duration. (b) On the lower lip at the edge of vermillion border a long, small plaque, made up of minute ulcers and of papillary excrescences which on the middle of the lip extended considerably downwards on the mucous membrane. The lesions existed since childhood and showed at times tendency to healing. (c) On chest about four inches from sternum and corresponding to the 6th and 8th ribs, two fistulous openings, covered with crusts. The patient's right apex is affected.

**Case of Acne Necrotisans Serpiginosa Nasi.** Presented by Dr. FISCHKIN.

Young man, twenty-six years old. On lower half of the nose aggregated pin to pea-sized papules, slightly elevated, reddish to brown-red in color, necrotic in the center. Between the papules as also on upper lip are scattered scars, of the same size. Patient complains of a severe burning sensation.

**Case of Pityriasis Rosea.** Presented by Dr. W. A. QUINN.

The lesions, in a woman of twenty-seven, were extensive, some of them atypical; considerable discussion followed as to the identity of the conditions, pityriasis rosea and herpes tonsurans maculosus.

**Case of Cutaneous Blastomycosis.** Presented by Dr. MONTGOMERY.

A man sixty-five years of age, a miller, in good general health. His disease began in January, 1907, as a pimple or small boil, on the cheek, and gradually spread over the nose and cheeks in the form of verrucous and ulcerating lesions. Soon after the disease began to spread on the face subcutaneous swellings appeared on the left forearm, which to-

gether with the left hand became greatly swollen and painful. After three months the swelling on the hand broke and discharged in several small openings. At the present time patient presents typical cutaneous lesions of blastomycosis of the nose and cheeks, and back of the hand. There is ectropion of the right lower lid. From the characteristic borders of the lesions blastomycetes were demonstrated in smears and recovered in cultures.

**Case of Lupus Erythematosus.** Presented by Dr. L. C. PARDEE.

The patient was a young woman of twenty years, in good general health, without significant family or past history. The present trouble began about four months ago as a small "red spot" on the left cheek, which gradually increased in size. At present it is about 4 c. m. in diameter, irregularly circular in shape, dark red in color, and covered with grayish, adherent scales; the edges are slightly raised. The case was of interest in the point of crescentic spreading and because at one stage the lesion suggested a late syphilide; at another a superficial type of blastomycosis.

**Case of Multiple Sebaceous Cysts of the Scrotum.** Presented by Dr. ORMSBY.

The patient, a man aged thirty-seven years, presented extensive involvement of almost the entire area of the scrotum, with pin-head to coffee-bean and larger sized, comparatively solid, tumor-like growths, which had existed since early childhood. At present the entire scrotal surface except on the posterior aspect is thickly studded with these masses. They vary in color from the normal color of the skin to a moderately yellowish shade. On puncture of some of these tumors, white, milk-like substance may be obtained; while from others only blood escapes. These lesions have, according to the patient's statement, gradually developed in number and size for many years, and there is no visible evidence of disappearance of any of them. There are no subjective sensations.

**Case of Leucoplakia of the Vulva, with Carcinomatous Change.** Presented by Dr. HYDE.

The patient, Mrs. H., was forty-eight years old, had been married thirty-two years, had given birth to six children. The vulvar alterations had been in progress several years. She states that the X-rays had been used for a period of five months, the last treatment having been given in October, 1906.

At present an indurated sclerotic mass involves the upper portion of the vulva, including the clitoris and upper portion of the labia, with a circular outline extending to the neighboring soft parts and with distinctly elevated border constituted of fused "pearls." There is distinct

leucoplakia of the internal faces of the labia majora and on the left side a circular fifty-cent-piece-sized elevated and vegetating lesion. On the opposite side are one or two smaller and less conspicuous but similar lesions. There is some inguinal adenopathy.

DR. ERNEST L. McEWEN, Reporter.

## BOSTON DERMATOLOGICAL SOCIETY.

April Meeting.

DR. CHARLES J. WHITE in the Chair.

**Adenoma Sebaceum, A Case of.** Presented by Dr. HARVEY P. TOWLE.

This case, as is usual in adenoma sebaceum, occurred in a young woman and on the face. Ever since she could remember she had noticed the eruption; its spread having been extremely slow. Disseminated over the cheeks and about the mouth, with moderate profusion, were small papules, pin-head to somewhat larger in size, of a pale pinkish-yellow hue. On close inspection, some of those of redder appearance revealed fine telangiectases running over their surfaces.

### DISCUSSION.

It was commented how closely this case agreed with adenoma sebaceum as usually illustrated and described.

**Lupus Erythematosus (?)**. Presented by Dr. HARVEY P. TOWLE.

The patient, a woman twenty-three years old, has had this disease upon her nose for five years, and the few similar lesions upon the right cheek for about two years. The first manifestation was upon the right side of the nose. One by one the other lesions appeared until now there are from twenty to thirty scattered fairly evenly over the face from its base to the tip and on the sides. \* Except for the three or four near the mouth, none have appeared elsewhere. While one or two have attained a considerable size, in the majority the growth has been so slow as to be imperceptible. None have disappeared spontaneously, and they have given rise to no subjective symptoms. When first seen there seemed to be no question of the diagnosis of lupus erythematosus, but closer and longer observation has served to throw doubt upon its correctness. When first seen, Oct. 11, 1906, there were scattered over the nose many lesions of the average of the head of a large pin, and of a red-brown color, which nearly disappeared on pressure. The centers of some of the largest ones showed a whitish spot which suggested a beginning atrophy. A prominent feature was a very narrow bright red line which surrounded them. The largest lesion of all, situated on the right ala, was one of the first to appear and showed a central somewhat depressed, level, firm, almost cicatricial center. The patient was ordered lotio alba. On her return, two weeks later, several of the larger lesions were covered with crusts, arranged in layers and somewhat depressed centrally. The



majority presented firm rounded masses, which projected slightly above the surface and which seemed to arise from the mouths of the ducts. The crusting quickly disappeared and the lesions seemed to grow harder and firmer. Now, if the finger is passed over the surface of the nose, the projecting masses give a distinct grating sensation. None of the lesions have visibly increased in size and none have disappeared. An attempt to incise the center of the largest lesion met with such resistance that considerable force was necessary. The projections showed the same hardness. The surrounding red zone has persisted and is still prominent. It has been noticed that the intensity of the color of the lesions is not always the same. Heat seems to increase the color and cold diminish it. With the increase of color from heating seems to go a quite marked perspiration of the nose, although the skin elsewhere shows nothing.

## DISCUSSION.

This case was considered to be lupus erythematosus by a majority of those present. On account of certain peculiarities, Dr. Towle was inclined to distinguish it by the name lupus erythematosoides (Leloir); a supposed mixed type of lupus vulgaris and lupus erythematosus.

**Extragenital Chancre.** Presented by Dr. HARVEY P. TOWLE.

This case is interesting only in connection with the similar cases of primary lesions of the lips which have been shown at previous meetings. The patient, a man of fifty-four, came to the Out-patient Department of the Massachusetts General Hospital with a sore on his lips which he said had been there for two weeks. One week later, when seen in consultation with Dr. Burns, it was thought that a roseola was developing upon the flanks and upon the inner surfaces of the forearms. To-night it can be plainly seen.

**Dermatitis Callorica or Hydroa-aestivale? A Case of.** Presented by Dr.

CHARLES J. WHITE.

The patient was a boy who, for the last two winters, had suffered from a perpetual dermatitis of the exposed portions of both ears. The boy was subjected to frequent refrigeration through his occupation of driving a wagon. The lesions consisted of circumscribed areas of dark red infiltration and oedema, and according to the lad's story they had been perpetually present throughout the cold months of the previous winter, and were still evident, although the severe cold was now past.

## DISCUSSION.

The peculiarities shown by the ears in this case were thought to be rather the result of frostbite and continued subjection to cold than a process due to any inherent deficiency of the tissues as hydroa aestivale or Raynaud's disease.

**Pityriasis Rosea of Atypical Distribution.** Presented by Dr. F. S. BURNS.

A man, thirty-nine years of age, usually in good health, developed a skin eruption two weeks ago mainly affecting the sides of the neck, but

also showing a few less well defined lesions on the flexor surfaces of the arms and on the anterior aspects of the thighs. Mild pruritus is the only subjective discomfort the patient has felt. The first of the eruption seen was a quarter-sized area directly under the mental process of the inferior maxilla. Thence the eruption spread down over the sides and front of the neck, covering, in the course of five to six days, a major portion of that region. From time to time, subsequently, the lesions on the arms and legs have appeared, though on these regions the individual lesions have never been so pronounced as those on the neck. The eruption is macular, annular, and circinate. Most of the ringed lesions on the neck are of oval contour with rosaceous and slightly palpable borders, and possess centers of a light café-au-lait hue, covered with fine furfuraceous scales. After viewing the neck it can be readily seen that the lesions on the limbs partake of similar characteristics, though less pronounced.

#### DISCUSSION.

Opinion generally concurred that this was a case of pityriasis rosea. The unusual locations of the outbreak was considered noteworthy.

F. S. BURNS, Secretary.

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### NEW YORK ACADEMY OF MEDICINE.

#### SECTION ON DERMATOLOGY.

Stated Meeting, held October 1, 1907.

DR. A. R. ROBINSON in the Chair.

#### A Case for Diagnosis. Presented by Dr. ORLEMAN ROBINSON.

Girl, age twenty-two months. She had whooping-cough at the age of eighteen months. There are three other children in the family, all healthy and free of any cutaneous diseases. There is no history of rheumatism or tuberculosis in the family. The lesions were first observed in June, the first one forming on the dorsum of the right foot; subsequently others formed on the legs, especially below the knees.

*Status praesens:* The lesions on the leg vary in size from a pea to nearly one inch in diameter. The most recent lesion situated on the anterior surface of the leg is pea-sized, sharply limited, slightly elevated, moderately rounded surface, reddish in color, the redness disappearing considerably upon pressure, and is somewhat scaly, the scales being composed of epithelial cells as shown by a microscopical examination. Upon the removal of some of the scales by a blunt instrument there was a rapid formation of an urticarial-like lesion with some itching. The other lesions on the leg vary from this one only in size, with the exception of one which is situated over the crest of the tibia and is one inch in diameter. It is fairly circular in form, sharply limited, elevated about one-eighth of an inch above the general surface, flattened, pale red in

color, with a shining non-scale surface. It is firm to the touch and appears as a slightly movable mass in the corium. This lesion formed one month ago, commencing like the pea-sized lesion previously described.

The largest lesion situated just below the ankle is one inch in diameter, roundish in shape, sharply limited, and elevated, the elevation starting abruptly from the general surface. The whole lesion presents a flattened surface. The peripheral portion, to the extent of one-sixth of an inch, is slightly more elevated than the rest of the lesion. The central part is dark red in color. The elevated periphery is whitish in appearance and is surrounded by a very small red areola, the redness disappearing very much upon pressure and reappearing quickly after removal of the pressure. The lesion is firm, giving the sensation of a sharply-limited new formation in the cutis. The surface presents a slightly scaly appearance.

Subjective symptoms are absent in all the lesions. Vasomotor disturbance on any part of the general cutaneous surface was easily produced by traumatism, red lines forming quickly, produced by injury from a blunt instrument, but the manner of reaction was insufficient to term the lesion one of *urticaria factitia*. The case has been one week under my observation, during which time the lesions have not altered in appearance.

The case is shown on account of the peculiar character of some of the lesions, the long duration of the lesions and the inability to place it among any of the well-recognized forms of erythema or other cutaneous diseases. It is evidently not a case of chronic urticaria, either symptomatic or idiopathic, nor of erythema induratum. I feel that only a microscopical examination will clear up the diagnosis.

#### Case of Elephantiasis. Presented by Dr. HOWARD FOX.

Miss ———, thirty-one, born in United States, where she has always lived, school teacher. An aunt is said to have suffered from a "milk leg." There is no other relative who has suffered from any enlargement of the extremities. Twelve years ago the patient first noticed a swelling of the right leg just above the shoe tops. From that time to the present the leg has steadily increased in size. Within three years the enlargement had extended up to the knee. She has had three attacks of phlebitis at intervals of two years, which confine her to bed for a fortnight. Treatment by electricity for six months has produced no improvement. Two months ago she began to suffer from a pruritic and oozing eruption of right leg and inner aspect of thigh. With the exception of this eruption, for which she seeks relief, she has suffered very little inconvenience from her affliction. The right leg measures 23 inches at the calf and 33 inches at the thigh, while the left leg (normal in appearance) measures  $14\frac{1}{2}$  inches at the calf and  $21\frac{1}{2}$  at the thigh. The enlargement of the right leg has extended slightly above Ponpart's ligament. The genitalia are not affected. She weighs 200 pounds, but has



the appearance of a woman weighing about 150 pounds. Previous to the eruption the skin had always been fairly normal in appearance. She limps slightly in walking. Her general health is excellent.

**Sclerosis of Each Nipple.** Presented for Dr. GOTTHEIL.

Mary M., age twenty-six, admitted to City Hospital Sept. 21, 1907, with the following history:

Six weeks ago her husband bit her on each nipple; did not cause any bleeding at the time, but left marks of his teeth. She took no notice of these marks at that time. As they gradually got worse, which fact the patient attributes to the irritation of her cloths, she came to the hospital for relief.

EXAMINATION.

*Right Breast*—Just above and outside the areola is an oval inflamed elevated and eroded mass, about  $\frac{1}{2} \times \frac{3}{4}$  inch in size, borders brownish-red and angry looking; center, depressed and exulcerated; the whole lesion marked by the painless, typical sclerosis of its base.

*Left Breast*—Entire nipple and areolar area swollen, reddened and covered with a brownish adherent crust; the nipple is enlarged to four times its normal size. The affected area shows a number of superficial circinate erosions. Around the entire nipple and areolar area is the hard, typical, painless, and sharply circumscribed indurated condition so characteristic of an initial sclerosis. The skin of this breast is intensely reddened and studded with a close set papulo-vesicular eruption. This condition is regarded as due to some external irritant, though the patient denies having used anything but vaseline. There is a general macular eruption, with distinct lesions on the left palm. Typical angina, and adenopathy.

Sept. 30—The large brown, red crust, covering the left breast, has come away, exposing a half-dollar size eroded lesion. The eczematous condition of the right breast is disappearing. The eroded mass on this breast has become slightly more elevated, otherwise unchanged.

There is a general small papular syphiloderm now present.

**A Case of Syphilis.** Presented by Dr. DAISY ORLEMAN ROBINSON.

J. L., female, age twenty-five, married. She came to my clinic at the North Western Dispensary, May 13, 1907. Examination showed a sore located on the right labium majus, which was oblong in shape, about one and one-fourth inches in length, and five-eighths of an inch in width at its widest part. It was sharply limited, elevated, and of firm margin. The surface was eroded, having a very slight secretion, reddish in color, with the central part depressed. The whole ulcer had a hardened feeling, and microscopically resembled an epithelioma on account of the reddish base, slight secretion, firm, sharply limited, deeply infiltrated margin, and larger size. No enlargement of the inguinal glands was observed.



Patient passed from my observation until September eighteenth. She states that an eruption appeared on the body in the early part of July, accompanied by pains in the joints and considerable fever. A mercurial preparation was prescribed by a physician in August. When I saw her again, she had a general syphilide, the lesions ranging from small papules to large tubercles, and large areas of general infiltration. The majority of the lesions were on the face, neck, forearms, and hands. The small papules were located specially upon the neck and elbow region, and showed a tendency to grouping. The papules and tubercles varied in size from a pea to a bean and even larger. There were patches of infiltrated areas especially upon the wrists. The anterior surfaces of the wrists were occupied by some papules, tubercles, and large infiltrated patches, the latter occupying the entire anterior surfaces of the wrists extending to the base of the thumb. The patch was an elevated, sharply limited, scaly, infiltrated one, as observed in chronic psoriasis or chronic dry scaly eczema. There was a well-marked leukoderma syphilitica on the sides and back of the neck and the upper parts of the shoulders. I had not observed that the whitish spots occupied the seat of previous lesions. The lesions upon the legs and body were large flattened lesions varying in size from a bean to a finger nail.

The case is shown on account of the unusually large size of the primary sore with its marked resemblance to an epithelioma, the multi-form character of the secondary lesions and the leucoderma syphilitica.

#### Case of Hereditary Syphilis. Presented by Dr. HOWARD FOX.

Patient is thirty-one years old, single, French-Canadian, seamstress. Her mother is living and healthy. When her father was twenty-seven years old he confessed to having contracted a "bad sickness." Previous to this, one daughter was born, who is now living and healthy, and one son, who died of small pox. Four children were born subsequent to the father's illness. The first child, a boy, born four months later, died four years ago of consumption. The other three children, all girls, were born two years and eight months, seven years, and twelve years, respectively, after the father's illness. The first is our patient. The second has always been delicate. She had a son who suffered from "asthma" shortly after birth and died of meningitis in his third year. The third died at four years of age of "brain fever."

The patient was apparently healthy at birth and remained so up to her eighth year. She then suffered from "lumps" in her nose and was treated for catarrh, but without benefit. A little later the nose began to ulcerate and within a year had entirely disappeared. At the same time there were deep sores on the cheeks. At fourteen she was treated at Randall's Island and after sixteen months all the sores had disappeared. Since then her appearance has remained practically unchanged. Examination shows the patient to be thin and delicate. The entire nose

and in addition the entire septum, middle and lower turbinate bones are absent. The hard palate and superior turbinates are intact. The upper lip has disappeared and the lower lip is drawn down by cicatricial contractions, disclosing two frightful-looking rows of teeth. Some of the latter are loose and their roots are exposed by retraction of the gums. The cheeks show extensive scarring.

**Sarcoma Cutis Haemorrhagica.** Presented by Dr. WILLIAMS.

The patient is a Jew, fifty-six years of age. He first applied to Dr. Bulkley's service at the Skin and Cancer Hospital, October 15, 1905. He said the disease had then been in existence for three years. He then showed disseminated brownish and purplish indurated masses on the hands and feet. The right instep was swollen, and both feet were very painful on slight pressure, while the hands were not painful. He was given X-ray exposures every second day, twenty minutes each to hands and feet, and internally, half an ounce of neurotine three times a day. The hands improved rapidly, the feet more slowly. X-ray ulcers developed, and were very slow to heal, that on the hand lasting until August, 1906, and that on the foot a few months longer. There has been no X-ray treatment since May, 1906, but the internal administration of arsenic has been continued for the past year in doses of Arsenious Acid gr. 1-50, three times a day. He now shows scars at the sites of the old X-ray burns, but the disease here seems to be arrested. There are new lesions, however, on the forearms—firm masses, deep in the skin, brownish and purplish in color, and not ulcerated.

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THE PHILADELPHIA DERMATOLOGICAL SOCIETY.

The regular monthly meeting of the Philadelphia Dermatological Society was held at the Jefferson Hospital on Tuesday evening, November 19, 1907, at 8:30 o'clock, with Dr. M. B. Hartzell in the chair.

**Ulcerating Vascular Naevus, An Extensive Case of.** Exhibited by Dr. HARTZELL.

The patient was a baby nine months of age. The growth of this naevus had been progressive since birth. This hypertrophy of the vascular tissues extended from the axilla and the upper part of the right shoulder, all the way down the arm, forearm, and included the palmar and dorsal surfaces of the right hand, and the fingers. At birth this condition occupied about one-half of the area now involved. Sensation was normal or possibly hyper-acute. There was a tendency to hematoma formation, particularly in the axilla. The sound skin between these blood vessels was of a bluish tinge. Motion of the arm was slightly impaired. The baby was in perfect health, plump and with a good color, she slept well, and was not particularly irritable. The remarkable thing in this case was

the fact that six months ago ulceration, apparently spontaneous, commenced in this nævus. This ulceration has been progressive, until now the entire outer surface of the nævus, reaching from the shoulder to the elbow, is involved in the one large ulcer. The ulcerated area is composed of many small ulcers, which have become confluent; destroying one-third of the upper arm. The pain is apparently slight, as the baby sleeps well, and does not cry excepting when the ulcerating surface is exposed to the air.

**Transitory Benign Plaques of the Tongue, A Probable Case of.** Shown by Dr. GASKILL.

The patient was a woman of fifty years, and had suffered from this condition for nine months. Three-quarters of the dorsal surface of the tongue was covered by two large, somewhat irregularly-shaped plaques; whitish in color, and resembling, excepting for their formation, a furred tongue. A few flat, slightly raised plaques, large pin-head in size, were noted on the right edge of the tongue, suggesting very strongly syphilis. Burning was complained of at night and on taking sour drinks. Several important points were brought out in the discussion; that glossitis sometimes results from the trophic changes from drilling and filling the teeth; that electric currents are sometimes set up by various fillings, thereby causing trophic changes. Gastro-intestinal disorders and syphilis were suggested as causal in this case.

**Hypertrophic Lichen Planus, A Probable Case of.** Presented by Dr. STELWAGON.

The patient was a woman twenty-five years of age and had suffered with this eruption, according to her statement, almost continuously for twenty years. The lesions were limited to the lower legs and consisted of about fifty deep-seated, split-pea sized and larger nodules, with a slightly scaly, rough, violaceous surface. Crops of vesicular lesions had been noted in the same location. There was intense pruritus. This patient had been shown at a previous meeting with lesions of the same character. Almost every form of treatment had been tried, including the X-rays; a strong chrysarobin ointment being the most beneficial. The members agreed that the classification was extremely difficult, several suggesting the resemblance to the cases of multiple itching tumors of the skin, reported by Hardaway, and by Schamberg.

**A Case for Diagnosis.** Presented by Dr. DAVIS.

The patient was a female of thirty-eight years. This condition had first been noted nine months previously. On the left side of the back, just below the margin of the ribs, there was seen a silver-dollar-sized reticulated patch, with pinkish-red lines, one-eighth of an inch in thickness, radiating across the surface. This patch was non-elevated, smooth, and showed no infiltration. At the first glance the resemblance to a syphilitic scar was marked, but on closer inspection the white areas were found to



be sound skin and not scar tissue. The pink color in the lesion could not be pressed out. Several possibilities as to diagnosis were suggested, but no conclusions were reached.

**Dermatitis Repens, A Probable Case of.** Exhibited by Dr. DAVIS.

The patient was a woman twenty-eight years of age, and she had first noted this condition eight months ago. The disease first started on the dorsal surface of the right hand, as a few small vesicles. These vesicles increased in size, broke, and then showed a raw, oozing surface. The epidermis surrounding the edges became more and more undermined, until the various patches became confluent. At the present time the entire dorsal surface of the right hand is involved, by this progressive, undermining dermatitis, from the wrist to, and including several of the fingers. The patient also has a few patches of seborrhoic eczema on the forearms.

**Cutaneous Atrophy, A Case of.** Exhibited by Dr. SCHAMBERG.

The patient was a girl of twenty years, and had first noticed this condition fifteen months previously. The entire face, the neck, the upper part of the back, and the shoulders were covered with pin point to small pin-head sized scars, really minute, non-infiltrated depressions. The skin was pliant and smooth. On the shoulders minute telangiectases were also noted. There was no scaliness or subjective symptoms. The face was somewhat congested, in the shape of a bat's wing, but this apparently was not pathological. The two diagnoses considered in this case were morphea and lupus erythematosus. No cause for the cutaneous atrophy was discovered.

**Epithelioma, An Extensive Case of.** Presented by Dr. SCHAMBERG.

The patient was a male of thirty-six years. The growth had started some years previously, and had been operated on three times during the last five years; each time with a recurrence. The patient had received numerous treatments with the X-rays, with resulting marked improvement. At the present time there is a quarter-dollar sized, deeply ulcerated lesion just to the right of the right eye, surrounded by a cicatrizing surface, where the former ulceration had healed. The case was shown with the thought that the present ulceration might have resulted from the X-ray treatment. The majority of those present agreed that some epitheliomatous tissue still remained.

**Eczema Seborrhoicum, Resembling Lupus Erythematosus, A Case of.**

Shown by Dr. DAVIS.

The patient, a male of thirty-seven, stated that the condition had lasted for some years. On the cheeks and the nose there was an erythematosus, slightly scaly eruption, which bore a resemblance to the butterfly arrangement of erythematosus lupus. The ducts of some of the sebaceous glands seemed to be somewhat patulous. The condition had improved markedly under mild treatment.

FRANK CROZER KNOWLES, M. D., Reporter.



# REVIEW of DERMATOLOGY AND SYPHILIS

Under the charge of A. D. MEWBORN, M. D.

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## BACTERIOLOGY AND PARASITOLOGY.

By A. D. MEWBORN, M. D.

**Dermatitis of Ground Itch, The Causative Factor in the Production of the.** C. A. SMITH. *Journal A. M. A.*, 1906, p. 1693.

In an attempt to prove that the larvæ of the *Uncinaria Americana* secrete an irritating substance in their passage through the skin in ground itch, the author collected a number of larvæ in the following manner: Sterile earth and water were mixed with human feces containing eggs of the uncinaria and placed in deep specimen jars. These jars were covered and placed in a cool draft of air to precipitate moisture on the inner sides of the jars. When the larvæ were hatched out in four days they climbed up on the insides of the jars aided by the moisture. The larvæ could then be easily collected on cotton swabs dried and put in absolute alcohol to extract the toxic substance. This alcohol containing the toxic principle was put on absorbent cotton and applied to the wrists of the subject of experimentation. In 24 hours there developed an eruption with severe itching. On the third day the eruption became vesicular and the irritation attained its height in four days, gradually subsiding on the 8th day. His experiments seem to prove that the eruption and itching are caused by the secretion of an irritating substance of the nature of toxicodendrol. The scratching and rubbing induced, favor the migration of the larvæ through the skin.

**Dermatomycosis of the Non-hairy Regions in Man Caused by the Microsporon Canis.** J. NICOLAS and U. LACOMME. *Ann. d. Derm. e. Syph.* 1906, p. 321.

The lesions in the patient here described as well as those in the dog from which the disease was contracted, appear to be absolutely identical with those described by the reviewer in a case contracted from a cat (*New York Medical Journal*, November 15, 1902).

Cultures upon glucose agar and beer wort agar taken from the patient and from the suspected dog gave practically identical growths.

These growths have the same characteristic concentric circles with yellow centers. Microscopically the cultures showed numerous fusiform

chlamydo-spores with numerous partitions. Inoculation experiments produced typical small spored patches of ringworm.

**Microsporons, Recent Research Concerning the.** (*Nouvelles Recherches sur les Microsporums*, by R. SABOURAUD, *Annales d. Derm. e Syph.*, 1907, March, pp. 160 to 183; April, pp. 225 to 245; May, pp. 326 to 336; June, pp. 369 to 386.)

After the exhaustive researches of Sabouraud upon the parasitic fungi of the scalp made twelve years ago, it is not surprising that he has found so many points of interest in the four studies here presented. The first point emphasized is that the expensive anhydrose glucoses, lactoses, maltoses, etc., are not as good for differentiating cultures as the commercial maltose, or glucose, which costs four francs a kilogram instead of two hundred, and when one considers the enormous quantity required in the course of a year for laboratory work this saving alone amounts to several hundred dollars. The two formulæ used in these studies were as follows:

Aqua,	1000.
Maltose brut de Chanut,	40.
Peptone granulée de Chassaing,	10.
Agar-Agar,	18.

and

Aqua,	1000.
Glucose massée de Chanut,	40.
Peptone granulée de Chassaing,	10.
Agar-Agar,	18.

It is only by means of comparing results upon the same medium that anything like international comparison of cultures can be thought of, these formulæ are, therefore, the most approved "milieux d'épreuve."

With cultures obtained by using the first formula Sabouraud gives superb double photographs of seven varieties of the microsporon:

1. Microsporon Audouini (Sabouraud).
2. Microsporon lanosum (Sabouraud).
3. Microsporon felinum (Colcott, Fox and Blaxall).
4. Microsporon umbonatum (Sabouraud).
5. Microsporon equinum (Bodin).
6. Microsporon caninum (Bodin and Almy).
7. Microsporon velveticum (Sabouraud).

Each variety presents a distinct typical picture in flask cultures. All of these varieties have been described elsewhere except the Microsporon lanosum, a new variety, which at the present time is the cause of one-third of the cases of small-spored ringworm met with at Paris. For description of cultures the reader is referred to the original. Clinically, this form of microsporon is characterized by the number and small size of patches, by the accompanying inflammatory reaction, often by an

accompanying generalized herpes of circinate type, and by the fact that it may affect the beard in man and cause a disseminated folliculitis. Its rapid growth in cultures and ease with which it may be inoculated upon guinea-pigs stamps it as probably of animal origin, although quite distinct from other animal forms already described.

It is a curious fact that in 1892 there were twice as many cases of microsporon infections as of trichophyton, but at present, owing to the rapid cure of the more easily recognizable types by the X-ray treatment, the percentage is reversed, *i. e.*, there are now twice as many trichophyton as microsporon cases.

In the extemporaneous examination of the suspected hair Sabouraud employs the 30% caustic potash solution or clears in formol (40%?). Staining process followed is to remove fat by chloroform, place in watch glass containing formol and heat for two or three minutes until ebullition, wash in distilled water, stain for a minute in Sahli blue, wash, dehydrate, xylol, balsam.

From a study of the morphology of the microsporon lanosum in its ectothrix and endothrix invasion (second and third article), Sabouraud shows that this fungus invades the horny layer of the epidermis by a plexus of sinuous filaments. The mouth of the hair follicle is invaded by agglomerated giant mycelium, forming a mycosic cone. The epidermis of the follicle around the hair is next invaded by a fine network of slender mycelium. Then giant ribbon-like mycelium descends from the mycosic cone, lying upon the hair shaft, bifurcating downward, breaks up into little islands of faceted large spores. The subdivision of these spores into smaller elements constitutes the sheath of small spores which is carried upward by the growth of the hair.

The third paper describes other mycelial filaments arising from the giant filaments and insinuating themselves into the trunk of hair shaft about the middle of its radicular portion these endothrix filaments become more and more delicate as well as numerous, some terminate in sigmoid branches on the surface of the hair shaft underneath the layer of small spores, other filaments in the hair shaft extend even below the enveloping sheath of spores as a filamentous fringe, "fringe of Adamson."

The fourth paper goes into the morphology of the endothrix filaments and the different theories as to the small-spore formation. The author acknowledges that there are still a number of obscure points to be elucidated.

## TREATMENT OF VASCULAR NAEVI BY RADIUM.

A communication to the Academy of Medicine of Paris, October 8, 1907, by Dr. Louis Wickham and Dr. Degrais.

[This contribution emanates from the Laboratoire Biologique de Radium of Paris of which Dr. Wickham is the clinical chief.]

In previous papers Wickham has stated that radium has a beneficial therapeutic action on epitheliomata, certain rebellious forms of eczema, prurigo, névrodermites and psoriasis.

The possibility of employing radium for the removal of vascular naevi was impressed upon the minds of the present authors by their previous demonstrations of the obliterative action of the metal on the capillaries and at the last meeting of the Paris Academy, they presented numerous tinted photographs illustrating the successful issue of their experiments on some vascular naevi varying from small angiomata to extensive, elevated erectile tumors.

The method of procedure consists in incorporating salts of radium of varying strengths in varnish and applying this paint directly to the surface of the vascular growth. To determine the duration of the application one must know the power of the salt employed and the structure of the lesion to be treated. For instance, 20 cm. of a salt (whose activity is 500,000 and which gives off 5% of alpha rays, 85% of beta rays and 10% of gamma rays) will produce an exulceration in one application lasting a half hour.

Wickham and Degrais have found that for flat and superficial naevi a light exulcerative action is necessary; while upon deeper tumors one must act more vigorously; and on those which project above the surface mild and repeated applications must be made which do not exert any visible, appreciable action at the time.

Two striking characteristics have been recorded in these experiments, i. e., the power of repair of the tissues and the absolute painlessness of the treatment. Regarding the former fact histological and clinical observations have demonstrated the embryonic rather than the customary inflammatory reaction of repair resulting in a tissue which hardly merits the name cicatrix; as to the latter characteristic one must be impressed with its great value when dealing with pathological conditions which affect principally infants and children, for a slight burning sensation seems to be the sole subjective symptom.



## BOOK REVIEWS.

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A Handbook of Skin Diseases and Their Treatment. By ARTHUR WHITFIELD, M. D. (London), F. R. C. P. New York and London, 1907. 320 pages. Illustrated.

This little book contains between its covers good things quite out of proportion to its size. Though the author says in his preface that the book was written for students, it seems to us that the physician who has had some experience in dermatology will be more profited by it than the student. There is a good deal of controversial matter in it that is interesting and suggestive, but that is not what the student craves. Moreover he wants clear-cut descriptions of the clinical features of disease, and it seems to us that it would be difficult for him to form an adequate idea of not a few of the diseases of the skin as portrayed in this book. On the other hand the author has given here the fruit of his experience as a dermatologist, the result being a book valuable far and away beyond that of the ordinary "Handbook."

With a few words about the anatomy and physiology of the skin, its lesions and general therapeutics, the author takes up the discussion of the dermatoses, beginning with those due to pyogenic infection. Without any definite classification, an attempt has been made to group diseases either under their etiology or symptomatology, such as those due to pyogenic infection, parasites, itching, erythema, seborrhœa, and the like. In an appendix useful directions are given for the preparation of specimens for microscopical examination.

It is a surprise to find dermatitis exfoliative neonatorum placed under contagious impetigo, and pompholyx, improperly called cheiropompholyx, regarded as only an acute eczema of the hands. The opsonic method of treatment is given and endorsed; and the indications and technique of Radiotherapy are well presented. Lactate of calcium is commended in urticaria and erythema nodosum. The latter, by the way, is held to be a disease distinct from erythema multiforme. Only the oily form of seborrhœa is recognized. In the etiology of eczema are given heredity, asthma, gout, and nervous conditions. In so common a disease as eczema it would be hard to prove that heredity is an etiological factor; and as to asthma, while there is no doubt that it and eczema sometimes play hide and seek, it would seem more rational to believe that both are due to the same underlying cause in a given case. It would be quite as rational to say that asthma was due to eczema as the reverse. Jacquet insists upon carious teeth as a cause of some cases of alopecia areata. This is partially accepted by our author, who adds eye-strain to the possible causes of the disease, as well as severe infection with pediculi capitis. These citations from the book will serve to show how suggestive it is.

We regret that we can not say a word in commendation of the illustrations. Our cousins across the sea can take beautiful photographs, but they do not seem to have mastered the art of halftone illustrations.

G. T. J.

Text Book of Diseases of the Skin. By ARTHUR VAN HARLINGEN, Ph.B. (Yale), M. D. 4th Edition. Thoroughly revised and rearranged with 102 illustrations. Phila. P. Blakiston's Son & Co. 1907. Pages 482. Price \$3.00 net.

Usually when a book has reached a fourth edition, the reviewer's task is easy. He has but to say: "Well done. Receive my congratulations, and best wishes for many reincarnations"; and his task is done.

It is not so in the case of the book now before us. Our old friend, the book, not the author, twelve years after the appearance of the third edition, has burst out into new life in a new dress. In previous editions the diseases were arranged in alphabetical order; in this they appear in the usual sequence, following the classification of Hebra. The former edition has suffered the fashionable operation of appendectomy—its appendix on diet in diseases of the skin has been cut off. I doubt if its health has been improved by the operation. The number of illustrations has been increased from 60 to 102, many of the new ones being excellent. Most wonderful of all, it has decreased in size, in spite of the immense amount of new knowledge that has been acquired during the years since last it was welcomed by the medical public.

Like in the previous editions, so in this, the subject matter is conservative, and the treatment advised is along the old well-tried lines. For a "Text Book" many of the diseases are inadequately described. The best section of treatment is that on eczema, which spreads over 45 pages, while to that of syphilis only one page is devoted, and in it no mention is made of intramuscular injections of mercury. The indications for the use of X-rays are quite fully given. That they are not mentioned in connection with the treatment of ringworm of the scalp is doubtless an oversight on the part of the author. We fail to find any mention of opsonins, and of the newer methods of light therapy, excepting that of the Finsen light.

The differential diagnosis of the principal skin diseases, is well detailed. This is but one of the commendable features of the book that have won for it an honorable place in the literature of dermatology, and called for so many editions.

G. T. J.

# THE JOURNAL OF CUTANEOUS DISEASES

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## TROPICAL DISEASES OF THE SKIN.

By H. RADCLIFFE-CROCKER, London.

Read before the Sixth International Dermatological Congress, New York, September 9-14, 1907.

IN accepting the task of opening a discussion on Tropical Diseases of the Skin, I assumed a responsibility of more difficulty than I at first anticipated. The size and complexity of the subject is so great that it is difficult to compress into the twenty minutes at my disposal anything more than a skeleton of the subject, and I could scarcely hope that out of such dry bones as I could set before you that a fruitful and practical discussion could arise even from such an audience of experts from all parts of the globe, as those whom I have the honor of addressing. Yet there are only too many moot points in most of the subjects, while the important and well-known lepra, though by no means exclusively tropical, embraces enough for a congress all to itself, which, indeed, it has already had without settling any of the points in dispute. Great Britain, however, from its numerous colonies and world-wide commerce, is frequently receiving its own wanderers and those from other lands, bringing with them various diseases from the tropics, and as a fair share of them has come my way, I thought a little of my personal experience might put a little flesh on some of the *bones* of my skeleton, and might aid in suggesting points for discussion.

Unfortunately, the isolated character of the cases, and the fact that they are nearly all private cases, and that in many instances the patients have left the tropics for some time, are great and often insuperable obstacles to studying the pathology of these affections, and my observations are therefore chiefly clinical. One of the great obstacles to our obtaining correct opinions of the nature and relationships of tropical diseases to those of temperate climates, is that

## TROPICAL DISEASES OF THE SKIN.

## DISEASES DUE TO VEGETABLE PARASITES.

Scaly	{	Tinea Tropica	{	Various species of large spored trichophyton rarely microsporon.		
		Tinea Imbricata		A large spored trichophyton, very like European trichophyttons.		
Pigmentary diseases	{	Tinea Versicolor.....	{	Microsporon furfur.	} Identical or analogous diseases.	
		Erythrasma.....		Microsporon minutissimum.		
		Achromia Squamosa..		Parasites of Jeanselme: In aggravated form in the tropics of Indo-China.		
		Pinta		{		Mexico
		Mal del pinto				
		Cute		{		{
		Caraate				
		Cative		{		Venezuela
						Granada
						Gautemala
Honduras						
Quirica	Panama					
Deep seated suppurating lesions	{	Actinomycosis	{	Pale	} Buenos Ayres and California. Fungus like blastomycosis, but with visceral implications.	
		Mycetoma		Black		
				Ked		
				Protozoic Dermatitis		

## ANIMAL PARASITES.

Nematoda	{	Dracontiasis		
		Craw Craw		
		Elephantiasis Arabum		
Trypanosoma	{	Trypanosomiasis or sleeping sickness.		
		Furunculus Orientalis	} Immature Trypanosoma or Leishman	
		Pemphigus contagiosus		bodies.
Insecta	{	Chigoe		
		Myaces		
		Ixodes		

## FUNGATING GRANULOMA LESIONS.

Frambesia	{	Yaws	West Indies	} General spirochaetic diseases
		Paranghi	Ceylon	
		Krocma	Upper Burmah	
		Dana Bai	Cambodia	
		Khunscarata	Siam	
		Khi Kai Chine	South Lastea	
		Khi Mo	North Lastea	
		Coko	Fiji	
		Tona	Polynesia	
		Tonga	North Caledonia	
		Verruga	Peru	
		Bombas	Brazil	

Local      Granuloma Inguinale Tropicum      West Indies, India and Fije



## TROPICAL ULCERS, ETC.

Furunculus Orientalis	{	Aleppo Boil	{	Leishman bodies— Early forms of trypanosoma
		Delhi “		
		Biskra Bouton		
		Gafsa “		
		Kandahar Sore		
		Pendjeh “		
		Edemic “ of Bahia		
		Annamite Ulcer		
		Peru of Malay		

Phagedena Tropica { Same as hospital gangrene due to an aerobic bacillus  
Aden, Malabar and (Boinet) an anaerobic bacillus (Matzenauer).  
Madagascar Ulcers }

Veld or Natal Sore { South Africa } Staphylococcus aureus  
Barku Rot { Queensland }

very few who have lived and worked in tropical climates have had a dermatological training, and good observers and recorders though they may be, yet they lack the advantage of being able to compare with first hand knowledge the two classes of diseases. We on our part, are in a similar position as regards many tropical diseases.

A glance at the above tables shows that practically all exclusively tropical diseases of the skin are due to parasites of various kinds, and although there is still much room for further investigation, they also show that much of our knowledge of their pathology has been worked out quite recently, and now that so many of those who are going to practice in the tropics are undergoing a course of training in modern pathological methods, we may well expect that in the near future, still greater additions to our exact knowledge will be made, and it is only exact knowledge which will enable us, not perhaps to treat the diseases themselves better than we do now, but still better to adapt the most efficient means for the prevention and spread of affections in which the disabling effects and mortality are so great. How much can be done in this direction the results of the discovery of the relation of the mosquito to filaria, malaria and yellow fever, are known to all.

The tables do not pretend to give a scientific classification of tropical skin diseases, but I trust that they may be helpful in grouping the principal pathological and clinical features. I have not put lepra down, as it is a disease which extends from pole to pole and at all events stands by itself.

## TROPICAL RINGWORM.

I have met with numerous cases of tropical ringworm from China, Burmah, India, Ceylon, Northeast and Southwest Africa, the West Indies, and various parts of South America—it is probably universal in all tropical countries. While its special site is in the crutch and axillæ, it may attack other parts where its characters are less marked than in the usual positions, and so its nature may be overlooked, and I have seen several instances where the neck, legs, feet and nails have been the seat of lesions. On the legs, the lesions are more or less circinate and well defined, but on the soles the circle is often fragmentary and only here and there a segment may be found which, with the history of residence in a tropical country, may afford a clue. The nails present nothing characteristic, but they will probably be thickened, crumbling, discolored, dull and with an uneven surface. One fact must be borne in mind, of which I have seen several instances, viz., that in temperate climates, the eruption may die away altogether for months in the cold season, and reappear with renewed vigor when the climatic temperature is raised.

While the clinical characters of the eruption do not sensibly vary in cases from different parts of the world, it is otherwise with their cultural characters. I have handed to my colleague, Mr. Pernet, many specimens, *i. e.*, scrapings of skin and nails from ringworm from various parts of the globe, amongst which may be mentioned Manila, China, the Cape, Japan and India, and under the microscope they were all large spored trichophytons; but they differed considerably in their cultures. Pernet writes to me as follows: "Microscopically, they varied in appearance, but it was more common to find long, sometimes very long, slender dichotomously branching mycelial filaments, often plain or only showing short segmentation here and there. In other cases, the sporulation was extremely well marked, the individual segments varying in shape and size, being either squarish or shortly rectangular, barrel-shaped, oval or distinctly round—in the latter case with a central dot. In some instances the nails were also affected and fungus was found in those structures. As to cultivations chiefly on maltose agar, they also varied. In one instance, the growth was of a distinctly pale pink hue at first. In another, a case of Dhobie itch, the second subculture was more like trichophyton megalosporon ectothrix, opaque, white and powdery. It is probable that the fungi belong to the trichophyton megalosporon group, but of different varieties. This

would agree with Sir Patrick Manson's view that Eastern ringworms are attributable to a large variety of fungi, and probably many of them are derived from the lower animals. I have not found the microsporon minutissimum of erythrasma which Manson thinks produces many cases of "Dhobie itch."

At University College Hospital, there have been several instances of packers undoing Japanese goods, which often arrive packed in straw or a kind of reed, contracting an agminated pustular folliculitis with circular lesions made up of closely aggregated pin's-head pustules on an erythematous base, but not raised up with the kerion-like appearance of Leloir's conglomerative pustular perifolliculitis. On microscopical examination, fungus elements with large spored ectothrix characters were readily found on cultivation. A pure culture from the first was produced with the typical characters of trichophyton melagosporon ectothrix, proving also the pyogenic properties of the fungus.

Jeanselme describes cases of negroes of Senegal with tinea tonsurans due to microsporon Audouini, but admits that most come from trichophytons, different both from each other and from French specimens. Courmon isolated two varieties. Sabouraud, in a young African from the Soudan, obtained a faviform culture from what was clinically a tinea tonsurans.

It is evident, therefore, that while the great majority of cases of tropical ringworm are due to trichophytons—of various species—the other forms of fungi play some part in their production.

Manson goes farther and asserts that the microsporon minutissimum of erythrasma, will in a tropical summer excite a dermatitis of a bright red color which resembles the inflammation produced by a trichophyton, and that many cases of so-called Dhobie itch are really inflamed erythrasma which has extended beyond its usual limits, and, secondly, pus inoculation may be produced by the violent scratching.

In cold weather it dies down with the usual reddish brown discoloration.

The microsporon furfur of pityriasis versicolor produces, as is well known, on the skins of the dark races, patches paler than the normal pigmented skin, the yellowish fungi flourishing exceedingly in hot climates and forming a yellow layer concealing the pigment beneath. Inflammation of the skin may also be excited by this fungus in hot weather, and again Manson says some cases of Dhobie itch are due to this fungus.

Tokelau ringworm on the other hand, appears to be confined to the southeastern portion of the globe, Polynesia, the Indo-Chinese Peninsula and south coast of China, Siam, Assam, Tonquin, but I have no personal observations on the subject, and as I can, therefore, only quote from the well known authorities on the subject, I will leave it to others to discuss this contagious disease, merely remarking that Nieuwenhuis, of Java, and Sabouraud regard the fungus as a large spored trichophyton like the animal forms of Europe.

The same might be said of Pinta and its congeners, and as it is a disease of this continent, I shall hope to hear personal experience and research from some members of this congress.

I should like to hear whether the diseases comprised under these names are one pathological entity or several closely allied affections due to different organisms.

I have never had a mycetoma under my care, but have had an actinomycosis from the west coast of Africa, in a colonial surgeon in whom it had commenced two years before, as an abscess over the left hip, which had resulted in a brawny hardness with numerous sinuses from which yellowish gray granules from a pin's-point to a No. 4 shot, could be squeezed; these presented the usual microscopic characters. Incidentally he owned to being a morphia and cocaine consumer, and had taken ninety grains of first, and fifty of second per diem.

Sabouraud says that there is in the extreme east an undescribed dermatomycosis, of which he has seen three examples which the patients said were due to frequent and prolonged immersion in stagnant water (Karaaté is also said to be due to this). One of Jeanselme's patients also attributed it to having his feet in marshes, and said that the lesions began in the lower extremities below his drawers.

Original lesions consist of erythematous plaques, more scaly than red, which become circinate when over two or three centimeters in diameter—but circination is incomplete or segmentary. The lesions may be extremely numerous and predominate on the lower half of the body. In dependent positions, there may be large polycyclic patches, but only one-third or one-half circles; the rest is badly defined. The base is bistre brown or even black. The border is scored by excoriation from scratching sometimes with bloody crusts, as the itching is sometimes ferocious, hence may follow thickening of the skin, with lichenification principally at the circinate borders. This border may then present polymorphic lesions, scaly, finely vesicular lichenified



and excoriated lesions, but the aspect as a whole is quite characteristic.

The microscope easily shows mycelium, separate, not double contoured, and of diverse forms, but with banana-like curves predominating, while the mycelial spores round are of variable diameter and are shed without forming a filament by their union. Jeanselme was unable to obtain cultivations. In one case there was double contoured mycelium and altogether he considers it a very distinctive dermatomycosis. He considers the patches on the inside of the thighs and buttocks particularly constant and characteristic. Cases came from Japan, Tonkin and Indo-China. One patient got it twice, but the disease disappeared gradually and spontaneously in Europe.

Mercury, sulphur, pyrogallic acid, salicylic acid and resorcin in large proportions failed, while chrysorobin, one per cent, to three per cent., cured rapidly.

Erythrasma, due to *microsporon minutissimum*, is very frequent in the tropics (so Manson also says) and forms dull red patches in groins and axillæ in cold, while in hot weather it becomes bright red and itching, and then extends beyond its usual limits to neighboring parts. The patient scratches, inoculates pus germs and small abscesses and boils may ensue.

Jeanselme has also observed on the coast of Annam and other parts of Indo-China, a vitiliginous squamous dermatosis which the people of Laos at Bangkok call *Khi*. He suspects it to be parasitic, but had not examined it.

It begins in infancy or adult age, and progresses very slowly. The palms and soles are double their usual thickness by a horny layer which forms deep sulci at the natural folds. At the base of this keratosis diffusa, numerous horny discs, more or less adherent, which are situated at the dilated orifices of the sweat glands, become detached. The keratoderma spreads to the back of the hands or feet and reaches above the wrists and ankles.

At the level of the invaded area the skin loses its elasticity and cracks. It is sown with little horny masses, chiefly grouped on the back of the metacarpo-phalangeal and interphalangeal articulations.

The affected skin presents achromic portions punched out like a puzzle and with a remarkable sharpness of contours which alternate with islets of hyperpigmentation of a sepia tint.

At the upper margin of the lesion at the level of the wrist or ankle, the vitiligo is gradually transformed into an erythematous-squamous condition. This zone of activity and extension, of which

the design is very capricious, is bordered by a fringe of psoriasiform scales or rather is covered with papules low and obtuse of a brownish lilac shade resembling lichen obtusus. Beyond this lichenoid or psoriasiform fringe, are irregularly scattered islets in ectasic glands. The nails of the fingers and toes are often thickened and stratified. They split and crumble without offering any resistance. It is somewhat itchy in the recent parts, but is not painful in the rainy season, the moisture restoring some of the elasticity to the skin, but in the dry season, the keratosis hardens and cracks into bleeding fissures which cripple the victims of the malady.

The malady is incurable, it is not in any way related to leprosy, and may be associated with chronic rheumatism.

The most striking feature is its family prevalence, which was marked in three out of five cases there.

Here follows a table and as in this husband and wife were affected, he infers contagion more than heredity.

Jeanseime states that since he published this he has found that Nieuwenhuis on tinea imbricata (*Archiv. f. Derm. u. Syph.*, Vol. xlii., 1898, p. 164), has described a similar disease in Java. He says that parasitocides such as sublimate, iodine and chrysarobin can cure the disease, and thinks its parasitic nature is certain.

#### FURUNCULUS ORIENTALIS

The sores which have various local names as in the list given in the tables, have all similar characters, and probably are all of the same pathogenic origin. It is best known in the east, but de Souza's observations on the endemic sore of Bahia show that it occurs in the west also, and probably it will be recognized in other districts as more accurate studies are prosecuted. Diplococci have been described by several observers as the pathogenic organism, but Wright's, of Boston, more recent observations suggest that the Leishman bodies are the real agents. These bodies are minute spherical or oval bodies with two chromatic masses, one very minute and deeply staining, the other large and less deeply stained. Leonard Rogers confirmed by Leishman himself and Christopher, have shown that in a suitable culture medium they develop into flagellated organisms of the trypanosoma type, but differ from the ordinary form.

Manson suggests, "that the 'Leishman body' leaves the human organism in the discharges from ulcerated surfaces: that it is ingested by some foul-feeding fly, in which it undergoes evolutionary changes and probably of multiplication perhaps sexually. The fly

then implants it in the human organism by bite or broken skin surface, and then in the human host it multiplies asexually by division."

Morphologically the "Leishman body" of Oriental sore, is identical with that of Kala-azar, and Manson suggests that its virulence may have been removed by transmission through the camel, but this is only a suggestion.

Clinically, I have met with one case in which a sarcoma developed on the site of the sore, and afterwards generalized with fatal results. In another case, a young lady who had had a Delhi boil as a child, when she grew up, in the scar a tuft of dark hair developed, which I removed by electrolysis.

According to Manson the affection he has described as pemphigus contagiosus is also due to "Leishman bodies."

As far as our present knowledge goes, therefore, we have to regard these affections as localized forms of trypanosomiasis which is somewhat startling and must widen our conception considerably of trypanosomiasis.

As the first of these cases occurred in an army surgeon, on the left cheek, his description of its mode of development is probably accurate and therefore of value. His age was thirty-one; I first saw him on May 15, 1894. The sore began in July, 1893, like a blind pimple or acne spot, visible and palpable, but painless; it enlarged subcutaneously to the size of a pea; then the skin exfoliated and it looked like an abrasion. It continued to enlarge with a succession of thin scabby exfoliations, and when the scab was removed an ulcer was exposed, the size of half an inch, shallow and punched out with a foul but even surface. Then at the end of October it began to fungate and has gradually increased in diameter to its present size of one inch across and one-fourth to one-third of an inch high, forming a strawberry-like plateau. In January an attempt at cicatrization occurred in the center and it became regularly cupped and occasionally a hair formed. This is interesting in relation to the other case where hair subsequently developed in the scar, and shows that the ulceration is not very deep. The cicatrization lasted three or four weeks, and then broke down and there is a longitudinal furrow in the center of the fungating sore. About thirty minims of dirty looking pus was removed every morning. Up to a month ago there was scarcely any infiltration round the fungation. My colleague, Mr. Arthur Barker, shaved it off level with the skin and then tried erosion, but the tissue was too tough and so he dissected the whole lesion out. The patient had complained of abdom-



inal pain just before the operation, but the true cause of this was not suspected, but soon tumors could be felt and he died between five and six weeks after the operation, of generalized sarcomatosis.

#### GENERAL TRYPANOSOMIASIS.

I have met with one instance of the erythema of general trypanosomiasis. The lesions when fully developed consist of rings or segments of rings from about a couple of inches to as much as a foot in diameter. The very large ones occur on the trunk, but on the face a single ring may embrace the whole cheek. Some describe these rings as well defined, but in one, two inches across, one week old, only a segment was well defined, the other portion shading off.

An early one that I saw began as a red spot about one inch in diameter, like an ill-defined pink blush, but they are by some, said to be well-defined in some instances. In a case of Manson's he especially remarked that they were ill-defined. These patches increase peripherally, and clear in the center until a ring is produced, or it may die down at one portion, and then a crescent is produced. Each lesion lasts from one to three weeks, but a week is the rule.

Besides these characteristic rings there may also be large ill-defined blotches of erythema scattered about, and Manson also mentions rubeoloid spots. My patient was the wife of a missionary on the Congo, who stated that the symptoms began soon after an insect bite on the leg. This was followed by frequently repeated attacks of fever, supposed to be malarial, and she was given quinine in huge doses for a long period, and the erythema was at first ascribed to the drug. She ultimately died of sleeping sickness. Patrick Manson reported this case as the first recognized in England. Habershon has had an exact replica of this case from the Congo also. Mott, who has examined the nervous system, shows that "there is a universal meningo-encephalitis in the form of a small-cell perivascular infiltration" (Manson), and it is this neurovascular paresis thus produced which explains the ringed and other forms of erythema. Although the trypanosoma Gambiense is found in all these cases, it is not yet conclusively proved to be the sole pathogenetic organism. Thus Mott and the Portuguese observers have found a diplococcus pervading the tissues of the body, especially numerous in the lymphatic glands. The species of Tsetse fly known as *Glossina palpalis*, is the transmitter of the trypanosoma Gambiense to man. As is now well known filaria perstans has been found in a large proportion of cases, and was supposed to be the materies morbi until it



was shown that sixty per cent. of the Indians of Demerara had filaria perstans, but sleeping sickness was unknown there. Farther, in Africa, numerous cases of sleeping sickness were found with no filaria perstans present.

The "Veld," the "Natal sore," and the "Barku rot" of Queensland are probably identical, and Harland claims that the staphylococcus pyogenes aureus is the materies morbi of the Veld sore. If this is correct it will in all probability be the same for the Natal sore and Barku rot—though it is maintained by the same writer that the Natal sore and the Veld sore are not the same.

The Phagedenic Ulceration of the tropics, Aden and Malabar ulcer and the Madagascar sore are probably identical. Phagedena tropica is met with in tropical latitudes all over the world, both east and west, and even in more northern latitudes, such as Algiers, Egypt, the shores of the Red Sea, while it is at its worst in Cochin China and Tonkin. It may be mild and chronic, or acute and severe; it starts often from a trifling lesion, and is almost entirely propagated by inoculation. It is by the majority of observers thought to be identical with hospital gangrene, for which Matzenauer finds an encrobian bacillus, while Boinet in phagedena tropica found an aerobic bacillus, so that the true organism is not yet decided.

#### YAWS.

Yaws is one of the most serious of tropical diseases, on account of the severity of its lesions, and of the enormous number of its victims in the countries in which it is endemic, which comprises practically the whole tropical zone, very few natives escaping, partly because mothers often deliberately inoculate their children to get it over, though some authors assert that it is not protective, while others say that it generally is, but that second and third attacks may occur (Nicholls). This is an important point on which I hope that some members of this congress with practical experience, may enlighten us. The main question is whether yaws and syphilis are identical, or only analogous diseases. We all know that Mr. Hutchinson has written a large volume setting forth that they are identical, but only the evidence of trained, practical observers of yaws, supplemented by experiments, clinical and pathological, are of value in settling such an important point. One difficulty has arisen in the past, viz., that it is probable that some observers have in their descriptions of yaws in some instances, mixed up the lesions of syphilis with those of yaws.

Quite recently a spirochæte resembling the *spirochæta pallida* of syphilis, has been described by Castellani. This and the clinical fact that the manifestations of yaws yield to mercury and iodide of potassium, judiciously given, no doubt lends more color to the theory of identity, but it by means proves it. Similarity of form and staining reactions is a long way from proof of identity of which the bacilli of tubercle and leprosy are a striking example. While if yaws is due to a spirochæta analogous but not identical with that of syphilis, an explanation would be afforded of the good effects of mercury and iodide of potassium. Probably inoculation experiments on anthropoid apes would assist in clearing up the point. Meanwhile we must still rely on carefully observed and recorded clinical facts and these are difficult to obtain in an indisputable form. Thus as above stated, some say that yaws is not protective against itself, while others say that it usually is, while syphilis we know is protective in a very high degree against itself. Then some say that yaws cannot protect against syphilis, nor syphilis against yaws, while others hold the contrary opinions. This, it seems to me, is the crux of the whole matter. Powell and Charlouis, both good and reliable observers, have each observed two cases in which persons with yaws have contracted syphilis with the usual symptoms coexisting with the yaws lesions. If the truth of these observations be admitted, it appears to me that the controversy is at an end and that yaws and syphilis are absolutely distinct diseases. Still it would be more satisfactory to have further corroboration on the clinical side on the one hand, and further investigation on the differentiation or otherwise, of the respective spirochætic organisms. A few other differences may be mentioned; it is said that auto-inoculation of yaws can be carried on indefinitely, while in syphilis this is not possible. The initial lesion of yaws is like the subsequent ones and does not start especially on the genital organs, and the mucous membranes escape except in the later stage of maltreated cases. Moreover, while it is contagious, it is never hereditary and the lesions are neither polymorphic nor symmetrical in the early stage and do not leave scars unless irritated or injured.

The resemblances are, the tendency to form circinate eruptions and for the lesions to group round the anus and other mucous orifices; nocturnal osteo-arthritic pains may be present and mercury and iodide of potassium are important remedial drugs, though they must be given cautiously, mercury being said to be injurious in the primary and early part of the secondary stage, while iodide of

potassium is not so efficacious against yaws as it is against syphilitic tertiary lesions.

Yaws, Boubas of Brazil and Verrugas of Peru, are evidently closely allied affections, and if a spirochæta is the pathogenic organism of yaws, it is a fair guess that spirochætæ will be found also in Verrugas and Boubas.

#### GRANULOMA INGUINALE TROPICUM

I have met with a case of this disease in a full-blooded negro. A point of interest in his case was that he had left the West Indies five years before it began as a flat sore on the penis behind the corona, attributed to impure intercourse nine days previously. He told Pringle, into whose hands he subsequently fell, that it began as a pea-sized boil in the right groin, which was scratched into a sore and spread down the scrotum at the side and up along the groin. Probably each of these statements was true for each situation, but that the penis was the primary point of infection. This case occurred before the publication of Conger's and Daniel's monograph, which showed that it was fairly common in British Guiana and the West Indies. Since then it has been noted in India, Fiji, the New Hebrides and New Guinea, and it probably occurs in all tropical countries. Goldsmith records a case in a white man who had had intercourse with a black woman. An apparently identical, but less extensive condition may occur in white persons in temperate climates and it seems therefore probable that the excessive development is racial rather than climatic, corroborated by my case having left the tropics for five years before it began, and having contracted it from a white woman. I am inclined, therefore, to regard it as an instance of staphylococcic infection which takes a virulent form in black races, but this is only conjecture and it ought not to be long before the real pathogenic agent is discovered. Removal has to be radical or the disease recurs.

#### CRAW CRAW

I should much like to hear any first hand information about crawl crawl. I have had two cases from the west coast of Africa, in which the patients were told they had crawl crawl, but one was a case of common scabies and the other of tinea tropica. Brault after analyzing the descriptions of other authors came to the conclusion that it was a sort of limbo into which African skin diseases which were not diagnosed were cast, and that it was not a distinct morbid

entity—but Geber came to the same conclusion with regard to *furunculus orientalis*, which is now universally accepted as a separate disease. Emily, a French colonial surgeon, gives a very succinct account of it, as a severely itching disease, producing deep ulcers, some as large as a five-franc piece, but these may easily be the result, in a hot country, of violent scratching. Jeanselme apparently regarded it as a virulent boil. Nicholls saw it in St. Lucia and coolie itch resembled Emily's description of *craw craw*.

The finding of *filiaria* in connection with *craw craw* goes for very little, as Manson has pointed out that the central African population are almost universally affected by *filiaria perstans*.

I am conscious of the fragmentary character of the above observations but they will I trust yield sufficient material for fruitful discussion.



## THE RELATION OF THE NAVY TO THE STUDY OF TROPICAL DISEASES.

BY SURGEON GENERAL P. M. RIXEY, U. S. NAVY.

Read before the Sixth International Dermatological Congress, New York,  
September 9-14, 1907.

WHEN I first received the highly appreciated invitation of the Organization Committee of the Sixth International Dermatological Congress to make a short address upon the relation of the Navy to the study of tropical diseases, it naturally appeared fitting that I should first take up the consideration of that branch of tropical medicine dealing with affections of the skin. The importance of this section of the diseases of the tropics is, however, so paramount in the Navy that I shall only be able to briefly refer to the lines of investigation which have been and are being pursued by the officers of the Medical Corps of the Navy in relation to cutaneous medicine.

That this statement is based upon fact and not expressed merely for the purpose of harmonizing with the object of this Congress is best shown by the statement that, taking a period of ten years, I find diseases of the skin caused practically twice as great damage to the health of the Navy as was caused by all other diseases of a quarantinable nature. When it is considered that I include such diseases as diphtheria, measles, smallpox, scarlet fever, r6theln, etc., in this latter category, the full import of my statement can be appreciated. The actual proportion was as 1 to 1.8. Were I to include syphilitic affections of the skin this disproportion would be greatly increased.

This is an age of research and of exact diagnosis, consequently the practice which prevailed in years past of designating every internal disorder of the tropics malaria and every cutaneous manifestation as syphilis, yaws, oriental sore, or lupus, according to the trend of local medical opinion, no longer holds good.

With the fevers it must now be determined by the aid of the microscope that the malarial parasite is present—otherwise, our attention is directed to the possibilities of affections not formerly recognized. The oft-repeated story that every tropical febrile case is deluged with quinine prior to death or diagnosis is familiar to all of you who have considered the matter of tropical diseases.

With skin affections I feel sure it must be the same, and with this idea in mind, my first aim when appointed Surgeon General of the Navy, in 1902, was to establish a school where the young officers of the Medical Corps of the Navy could be grounded in the essentials of medical research.

It was unreasonable to expect our medical schools to curtail the periods devoted to the essentials of practice of medicine and surgery in order that a more extended course in laboratory work as applied to tropical medicine should be given. Consequently, in the fall of 1902, the first detail of recently appointed medical officers of the Navy was made to the Naval Medical School.

For a proper appreciation of the many tropical skin diseases due to animal parasites, and of the many which may hereafter be found to be of such etiology, it is my belief that a sound working foundation in medical zoology is not only desirable but essential. The Naval Medical School is fortunate in this respect inasmuch as the instruction in this branch is given by a zoologist who is not only eminently practical in his teaching, but who possesses in rare degree the faculty of imparting enthusiasm to those who study under him. I refer to Dr. Charles Wardwell Stiles—the American authority in medical zoology.

For honest and capable work in any branch of tropical medicine it is necessary that the worker be grounded not only in clinical observation, but he must possess a fair degree of proficiency in bacteriology, a good working knowledge of animal parasitology and, besides, have enthusiasm for his work. Scientific curiosity to be of value to the profession must be bred of knowledge, animated by enthusiasm, and controlled by judgment.

The medical officers of the Navy are, while in tropical waters, constantly required to study or treat such affections as ringworm and the peculiarly virulent cutaneous manifestations of syphilis. As regards syphilis, I have been struck by the favorable reports which have reached me from our naval hospital in the Philippines, in which attention is called to the infrequency of the intractable skin lesions, so common previously, after the routine employment of hypodermatic mercurial medication. Mercury by the mouth, or, preferably, by inunction, may control the ravages of the disease in temperate climates, but some factor in the tropics tends to lessen the power of such forms of treatment to control the disease in hot climates.

While serving on shore stations in the tropics, or when cruising in such waters, the naval medical officer is constantly in contact with

such diseases as yaws, leprosy, ground itch, elephantiasis, tropical ulcer, and the like, and in consequence these diseases are of great interest as well as of importance to him in the performance of his duties. These affections, however, are of such common interest and of such general knowledge that I shall pass them over to present to your attention three or four diseases of which I am very desirous that some of our medical officers may advance our knowledge, or give us some insight into their etiology and pathology. Of these I shall first call your attention to gangosa or rhino-pharyngitis mutilans. This disease, which was studied by Daniels in the Fiji Islands, is unfortunately very prevalent in our island possession of Guam. The clinical manifestations of the disease as observed in Guam were brought out by Surgeons Arnold and Leys of the Navy, and more recently by Assistant Surgeons McLean and Mink. During the summer of 1906 I detailed Surgeon Stitt of the Navy to investigate the cause of this disease. The result of his investigation, which was published in my report for the year 1906, was of a negative character. From the work which had been done in connection with the etiology of syphilis and yaws he was in hope that a spirochæte might be found to belong to gangosa, but as to this he was unable to establish any evidence. It is possible that with some of the more recent methods of staining better success may be had.

Dr. Fordyce, the Secretary-General of this Congress, has also investigated the lesions of this peculiar disease, but so far as I have been able to learn, without success as to determining its etiology. Here is a disease which starts as a small membranous patch of the throat which in a few days proceeds to perforation of the hard palate and thence to the most frightful ulcerations of the nasal cavities. Those who have studied it most carefully are positive it is not syphilis and absolutely sure it is not leprosy—what is it?

Sir Patrick Manson recently, in conversation with one of the members of our corps, remarked that in Samoa there should be a splendid field for renewal of the work in connection with filariasis, especially from a pathological standpoint. The determination of the exact method by which lymphatic obstruction is brought about in this disease would be of the greatest importance. One of the medical officers, who served for an extended period of time in Samoa, informed me that although the sailors of our Navy were constantly exposed to infection by mosquitoes while ashore, yet there had never developed among them a case of any filarial disease. The only striking point of difference in habits was in the fact of our sailors drink-

ing distilled water—is it possible that there are other methods of transmission of this disease than by the mosquito?

Another puzzling affection is what is generally termed “climatic bubo.” Here we have a case which presents the picture of a prolonged continued fever following more or less the increase or decrease of the glandular swellings. It is not related to any venereal affection and the question comes up—has it any relation to dhobie itch or other mould affection of the skin, as some think?

Speaking of dhobie itch and the various affections of the skin so common in the tropics, including prickly heat, I am forced to believe that some of the so-called tropical neurasthenia may be connected with these affections.

The constant irritation induced by such conditions, with the attendant loss of sleep, must result in a mental state which, in a person not leading a life adapted to the tropics, will bring on a deterioration of the mental as well as the physical side.

While alcoholic excess and undue exposure to the rays of the mid-day sun may not account for all the phenomena of mental deterioration in the tropics, yet it cannot be gainsaid that such factors will produce marked aggravation of skin lesions and incidentally lead to conditions surely conducive to nervous prostration.

While in temperate climates one may not suffer seriously from neglect of treatment of simple skin affections, yet in the tropics it is a different matter, and in consideration of the fact that the greater part of the time of our force afloat is spent in tropical waters, the importance of this question for the Navy cannot be overestimated.



## OBSERVATIONS ON SKIN DISEASES IN THE NEGRO.

By HOWARD FOX, M. D.

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Read before the Sixth International Dermatological Congress, New York, September 9-14, 1907.

**I**N presenting to you the subject of skin diseases in the negro, I have a double excuse to offer. I feel in the first place that this branch of dermatology has long been sorely neglected. In the second place I have hoped that, as the opportunities to observe negroes abroad are very limited, this subject might prove of interest to our foreign visitors.

Valuable statistics upon five hundred and fifty-six cases of skin disease in the negro have been contributed by Dr. Isadore Dyer of New Orleans. With the exception, however, of Morison who compared five hundred cases of skin diseases occurring in negroes with an equal number of whites, no one has attempted a statistical comparison of skin diseases affecting the two races. Owing to the kindness of Dr. Gilchrist of Baltimore, and Dr. Carmichael of Washington, I have been enabled to make a comparative study of 4400 cases, half of them in the negro and half in the white race.

It would perhaps have been more fitting if the subject had been treated by one of my Southern colleagues whose opportunities for studying negroes are much greater than any we have in New York. My sources of information, however, include a correspondence with physicians in all of the South Atlantic and South Central States, with the exception of Delaware, Indian Territory and Oklahoma, making a total of fifteen states, including Missouri. In this area are to be found approximately nine-tenths of the negroes of Continental United States.

My personal experience has been confined chiefly to the Vanderbilt Clinic in the service of my father, Dr. George Henry Fox. As there is a considerable negro population in the neighborhood of the clinic, very fair opportunities for observing skin diseases in this race have been presented. The majority of cases in my exhibition of photographs are from the Vanderbilt Clinic.

My statistics are partly from the Central Dispensary of Washington, and partly from the Johns Hopkins Dispensary of Baltimore.

The objection that these statistics are from practically one section of the South, Baltimore and Washington being neighboring cities, is a valid one. I should like to have obtained records from several widely separated regions of the South, but it was not possible for me to do so.<sup>1</sup>

Though the literature pertaining to skin diseases in the negro is very limited, I have found especially valuable information in the writings of Atkinson, Morison, Dyer, Corson, Matas and Rufz.

The history of our colored population dates from 1619, when the first slaves were brought to Virginia. In 1776 more than 300,000 slaves had been brought to the colonies, and at the end of the Civil War there were four millions of negroes in the United States. According to the twelfth census, that of 1900, there were approximately 8,840,000 negroes in Continental United States, out of a total population of nearly 85,000,000. It seems to me that this vast number of negroes affecting by its presence the statistics of economics, social and political science, must also have its influence on medical statistics and should be worthy of study in every branch of our science.

Although at present the American negro represents a fusion of numerous African tribes, it is still thought possible by some to distinguish certain subtypes. According to Otken, "We have in the United States the Guinea negroes, Yolloffs and Caffres. To these must be added those in whose veins flow one-half, three-fourths or seven-eighths white blood, or the mulattoes, quadroons and octoroons. (The last three are designated usually by the common title mulatto.) The Guinea negroes constitute an overwhelming majority. They are characterized by their woolly hair and black skin, thick lips, broad flat nose, prognathous jaws, receding forehead, slender limbs and massive feet. The Yolloffs in addition to woolly hair and jet black skin, possess a fine form and strictly European features. The Caffres have woolly hair, blackish-brown complexion, and have a fine form and features. The Yolloffs and Caffres may constitute from five to ten per cent. of the pure African race."

Interesting as the study of the various types of American

<sup>1</sup> The statistics from the Central Dispensary include 1200 cases of whites taken from ten consecutive years, 1897 to 1906 inclusive, and a similar number of cases of blacks for eight consecutive years, the blacks at this dispensary being numerically greater. The remaining one thousand cases of each race are from the Johns Hopkins Dispensary. At the latter clinic owing to the disproportion in favor of the whites, the records of one year, February, 1906 to 1907 only, were required to furnish one thousand consecutive white cases, whereas six years (November, 1901 to February, 1907) were required to supply an equal number of cases in the negro.

negroes may be, it is of more practical importance for the purpose of this inquiry to obtain some idea of the numbers of mulattoes in the Southern States, the region from which my statistics were obtained. It was the conclusion of four independent groups of enumerators of the twelfth census, that between one-ninth and one-sixth of the negroes in Continental United States showed an admixture of white blood. The greatest number of mulattoes were found in regions where the proportion of blacks to whites was small and the smallest numbers where the proportion of blacks to whites was large. This is well illustrated by the report of the eleventh census, showing thirteen per cent. of mulattoes in the South Atlantic States, twenty-three per cent. in the North Atlantic and sixty-two per cent. in the Western States. For the purpose of enumeration, all persons were classed as negroes who were considered to be such in the communities in which they lived. The same census showed fifteen and nine-tenths per cent. of mulattoes for the State of Maryland, and the rather high figure of twenty-six and two-tenths per cent. for the District of Columbia, from which a considerable part of my statistics were obtained.

It is the question of mulattoes that presents one of the great difficulties of a statistical inquiry like the present one. If my study could have been confined solely to full-blooded negroes, it would unquestionably have been of greater scientific value. Although my statistical tables include without discrimination all "colored" persons from the octoroon to the full-blooded blacks, I have obtained, however, from my correspondents, some valuable information relating solely to the full-blooded negroes.

A very obvious difficulty to the study of skin diseases in negroes is presented by their deeply pigmented skin. On this account a diagnosis of the exanthemata, rosacea, in its early stages, the various forms of erythema and purpura, and certain pigmentary affections is often difficult and at times impossible.

Another difficulty is presented by the unreliability of statements of many negro patients. The following description of Dr. Grindon of St. Louis, truthfully represents the dense ignorance of a considerable portion of our negro population. "Negroes rarely know their ages, and in stating them are often as much as twenty years out of the way. Women are often 'about twenty' until they cease bearing children. Soon after that they are 'about seventy.' After some ten years of this they are 'over a hundred.'"

In the effort to determine the relative frequency in general of skin diseases in the two races, a further difficulty is encountered by



the fact that negroes do not seem to patronize our public clinics as often as whites. Their numbers in dispensary practice, according to Drs. Grindon, Dyer and Rosenthal, are proportionately less than those of the whites. They are only apt to seek treatment for affections of the skin which cause positive annoyance or pain. Their smaller attendance at our clinics may be due as Dr. Grindon suggests, to the careless habits of their race and to their widespread though lessening prejudice against medical schools, and all that pertains thereto. In order to obtain positive proof that skin diseases are less prevalent in the negroes than in the whites, it would be necessary to ascertain the total white and black population of a community, and to compare this with the total number of applicants at dermatological and at all other combined clinics. Though I have not undertaken such a heroic task, my conviction is firm that negroes do *not* suffer from skin diseases in general, as often as whites.

Do negroes suffer less severely than whites, is a question which naturally follows. It will be one of the objects of this paper to attempt to answer this question in the affirmative and to show that most diseases of the skin, affect the negro *less* severely than they do the whites. This proposition, if true, will seem the more unusual in view of the well-known susceptibility of the negro to a large number of constitutional and other diseases.

That the American negro at present suffers more from disease in general than the white man, is shown by the reports of the last census. The mortality in the registration area for the negro was found to be thirty and two-tenths per cent., while that of the whites was only twenty-seven and three-tenths per cent., or less than half as great. Furthermore, according to Frederick Hoffmann, a statistician of authority, the mortality among the negroes is on the increase, whereas that of the whites is diminishing. The same writer states that the colored race is subject to a greater mortality from all diseases of infancy, consumption at all ages, pneumonia, venereal diseases and even malaria.

Before attempting to analyze the more important skin diseases in the two races, it may be well to remind you of certain anatomical differences in the skin, to which doubtless some of the disproportion in frequency and severity of different skin affections is due. It is well known that the characteristic pigmentation of the negro skin is not present at birth. In speaking of negro babies, Brodnax says, "They are not of the clear pink of the pure Caucasian, but present a color of tallow, a muddy white, not colored or tinted. In cases in



which both parents are true blacks, the deepening of the color is seen in a few hours, and in a couple of weeks, the skin is quite dark, attaining its full depth in about two months." Simonot states that the negro acquires the maximum of his color at puberty, and that old age leads frequently to a certain decoloration of the skin. The light color of the palms and soles, lateral borders of the fingers and portions of the mucous membrane of the mouth, prepuce and vulva, approaches closely to that of the white. The deeper pigmentation is seen upon the posterior portion of the trunk, shoulders, loins, buttocks and upper portions of the thighs. The difference in pigmentation is simply one of amount and distribution.

The entire skin of the negro, especially the derma, is thicker than that of the white. This is also true of the subcutaneous tissue as exemplified by the characteristic thick lips of the negro.

It is in the appendages of the skin that some of the racial differences are most striking. The glandular system is certainly more highly developed in the negro. The greater production of sweat is largely responsible for the suppleness of the negro skin and aids him to endure the intense heat of the tropics. The sebaceous secretion gives to the skin its shiny aspect and characteristic odor.

The short kinky hair next to his dark skin is the negro's most characteristic feature. To the slight development of lanugo hair is largely due the soft velvety feeling of the negro skin. The lessened hairy development is also seen in the hair of the beard, axilla and pubes. Finally, it should be mentioned that the negro is decidedly less susceptible to pain than the white man.

I should like to begin my analysis with a consideration of the effect upon the negro skin of external irritants. Among the latter should be included the sun's rays and other forms of radiant energy, as well as various irritants of vegetable and mineral origin. There seems no doubt that to most forms of external irritation, the negro skin is decidedly less susceptible than that of the white. A hot sun which will severely burn the white skin will have no effect upon that of the negro. Dr. Boyd of Jacksonville, writes me that he considers it very difficult to "blister a pure negro." It would be interesting to know whether the reaction to the X-ray was slower in making its appearance, or milder in the negro than in the white. My experience in treating negroes with the X-ray has been very limited, and I have unfortunately not obtained expressions of opinion upon this subject from my correspondents. My statistics for cases designated as dermatitis and dermatitis venenata (affections due to external

irritants), give a total of 113 whites to 56 blacks, or just twice as many whites as blacks.

An example of lessened susceptibility to vegetable irritants is given by my statistics for poison by the rhus toxicodendron, which showed twenty-two cases in the white against eight in the black. While these figures show a much greater prevalence of ivy poisoning in the white, the disproportion in my opinion would have been much greater in a comparison of whites with full-blooded negroes. In replying to the question, "Is the negro immune to ivy poisoning?" the answer, "I have never seen a case," or "I have never seen a case in a full-blooded negro," has been given by a majority of my correspondents. Many add that they frequently see ivy poisoning in the white race. Four have answered "no," without any further qualification. Dr. Whitehead of Atlanta and Dr. Engman of St. Louis, both write that they have seen some severe cases. Others answer, "Almost immune," or "nearly so." Dr. Strobel of Baltimore, answers "Not immune, but cases very uncommon, so much so that one severe case I saw in a negro boy impressed me." Dr. Bernard Wolff of Atlanta, writes me of a railroad contractor who employed 150 negroes in a region where poison ivy abounded. Not one of these men suffered from ivy poisoning. In the statistics of Morison, and in those of Dyer, no cases of ivy poisoning in the negro are recorded.

TABLE I.  
ABSCESS—FROST BITE.

Disease	Clinic	WHITES			NEGROES		
		Total Patients Applying	Cases	Percentage	Total Patient Applying	Cases	Percentage
Abscess, Carbuncle, furuncle, furunculosis, phlegmon	Surgical	4072	750	.184	6873	1056	.153
Frost Bite and Chilblains	Surgical and Skin	6272	26	.00414	9073	78	.00859

Statistics compiled from Central Dispensary of Washington, D. C., for nine consecutive years, 1898 to 1906.

In considering the probable effect of heat and cold upon the negro skin, it would be natural to expect that eruptions due to heat

would be less common in the negro, and that frost bite and chilblains the result of cold would be more common. As a matter of fact, this is rather strikingly shown by my statistics. There were twelve cases of miliaria and heat rash in the white and only two in the black. On the other hand only one white as against fourteen blacks appears under the heading of frost bite and chilblains. The latter figures must, however, be modified as the majority of cases of frost bite at the Central Dispensary at least, were treated in the surgical clinic. I have, therefore, tabulated the cases of frost bite and chilblains that applied at the latter clinic during nine years. Added to the other cases, a total of twenty-six white and seventy-eight blacks is given, or when the total number of patients is considered, the proportion of blacks to whites was two to one. Morison considers chilblains a common disease in the negro, his statistics giving ten cases in the black and three in the white. If chilblains are more prevalent in the negro, and I believe that they are, a reasonable explanation would be that negroes are more exposed, and more poorly clad and housed than their more fortunate white brethren.

In an effort to compare the susceptibility of the two races to the ordinary pus germs, the different varieties of the staphylococci, I have tabulated cases designated as phlegmon, abscess (tubercular, ischio-rectal and alveolar being excluded), furuncle, furunculosis, and carbuncle. My figures which are taken from the surgical clinic of the Central Dispensary for nine years, show seven hundred and fifty whites, and one thousand and fifty-six blacks, or in proportion to the attendance of the two races, eighteen per cent. for the whites and fifteen for the blacks. A similar table of Matas containing nearly half as many cases gives almost exactly the same proportion for the two races. The mortality, however, is stated as being three times as great in the negro. Tiffany's statistics show fifty-seven per cent. of abscess for the white and forty-three per cent. for the black. Kinloch says, "I think suppuration in the pure black is less than in the white." On the other hand, Richardson's table, from a much smaller number of cases shows abscess to be nearly twice as common in the negro as in the white. Corson also thinks the negro has a greater susceptibility to pus cocci. My statistics would, however, seem to bear out the conclusion of Matas that "Blacks are not more subject and possibly less so to acute circumscribed and pyogenic infections." The figures in my table for furunculosis alone, show a rather striking disproportion with fifty-two cases in the white and only fifteen in the black.

If it is conceded that erysipelas, contagious impetigo and ecthyma are due to infection by the streptococci, it would appear from my figures that the negro shows a lessened susceptibility to this organism. Of these combined affections, two hundred and twenty-nine were present in whites and one hundred and eighty in blacks. Richardson's table for erysipelas shows practically the same proportion in the two races, while the figures of Matas give seventy per cent. in the white and forty-two per cent. in the black. with again a higher mortality for the latter.

A study of the more important inflammatory diseases of the skin, show, I think, some interesting differences in the two races. I have been greatly surprised to find in my statistics, the comparatively large total of 101 cases of acne in the black as opposed to 163 in the white. If Mulattoes could have been excluded from my table, I am sure a much greater disproportion in favor of the blacks would have resulted. I have for some time scrutinized every negro seen on the street, as well as in the clinic, and am of the opinion that in New York, acne of the face is decidedly uncommon in the full-blooded negro. It may be well to mention that the negro population of our city is somewhat over 60,000, and is only exceeded by that of Washington, Baltimore, New Orleans and Philadelphia. I feel very certain of the fact that acne in the negro is a milder affection than in the white, an opinion with which most of my southern colleagues entirely agree. Well marked cases of acne indurata in the dark race are indeed rarities. While my figures for acne in the blacks show four and six-tenths per cent. of the total cases of skin diseases, Dyer's show only one and nine-tenths per cent. and Morison's one and eight-tenths per cent., all of the latter's cases, nine in number, being mulattoes. Only six cases of acne, of which four occurred in whites, are given in the report of Rufz, a French physician, who practiced medicine for twenty years in Martinique. The careful observations of Rufz in a country where there were roughly sixteen times as many blacks as whites, form a most valuable contribution to the dermatological literature of the negro.

TABLE II.

Skin Diseases (2200 Whites and 2200 Blacks.)

	Whites.		Blacks.	
	Cases.	Percentage.	Cases.	Percentage
Acne .....	163	.074	101	.046
Alopecia .....	12	.0054	1	.00045
Alopecia Areata .....	10	.0045	10	.0045



	Whites.		Blacks.	
	Cases.	Percentage.	Cases.	Percentage
Callositas . . . . .	1	.00045	3	.00136
Chloasma . . . . .	9	.0041	4	.0018
Clavus . . . . .	2	.00091	8	.00363
Dermatitis . . . . .	89	.0404	50	.0227
Dermatitis Medicamentosa . . . . .	7	.00318	3	.00136
Dermatitis Venenata . . . . .	24	.0109	6	.00272
Dermatitis (Rhus) . . . . .	22	.01	8	.00363
Dermatitis Herpetiformis . . . . .	5	.00227	3	.00136
Dysidrosis . . . . .	3	.00136	2	.00091
Ecthyma . . . . .	28	.0127	16	.00727
Eczema . . . . .	490	.222	521	.236
Eczema Seborrhœicum . . . . .	28	.0127	28	.0127
Epithelioma . . . . .	22	.01	2	.00091
Erysipelas . . . . .	4	.0018	10	.0045
Erysipeloid . . . . .	10	.0045	2	.00091
Erythema and E. Hyperæmicum . . . . .	4	.0018	0	
Erythema Multiforme . . . . .	21	.0095	10	.0045
Erythema Nodosum . . . . .	2	.00091	3	.00136
Favus . . . . .	3	.00136	4	.0018
Folliculitis . . . . .	5	.00227	9	.0041
Frost Bite and Pernio . . . . .	1	.00045	14	.00636
Furunculosis . . . . .	52	.0236	15	.00681
Herpes Simplex . . . . .	6	.00272	5	.00227
Hyperidrosis . . . . .	7	.00318	3	.00136
Ichthyosis . . . . .	4	.0018	1	.00045
Impetigo Contagiosa . . . . .	197	.0895	154	.070
Intertrigo . . . . .	4	.0018	0	
Keloid . . . . .	1	.00045	10	.0045
Keloid Acne . . . . .	1	.00045	10	.0045
Keratosis . . . . .	4	.0018	4	.0018
Lichen Planus . . . . .	12	.0054	8	.00363
Lupus Vulgaris . . . . .	4	.0018	2	.00091
Lupus Erythematosus . . . . .	5	.00227	4	.0018
Miliaria and Heat Rash . . . . .	12	.0054	2	.00091
Paronychia . . . . .	3	.00136	7	.00318
Pediculosis Capitis . . . . .	54	.0245	5	.00227
Pediculosis Corporis . . . . .	15	.00681	20	.00909
Pediculosis Pubis . . . . .	5	.00227	2	.00091
Pityriasis Faciei . . . . .	2	.00091	4	.0018
Pityriasis Rosea . . . . .	7	.00318	6	.00272
Pruritus . . . . .	3	.00136	8	.00363
Pruritus Senilis . . . . .	11	.0050	22	.010
Psoriasis . . . . .	49	.0222	10	.0045
Purpura Simplex . . . . .	7	.00318	1	.00045
Rosacea . . . . .	25	.0113	1	.00045
Rubeola . . . . .	1	.00045	4	.0018
Scabies . . . . .	243	.1104	170	.0772
Seborrhœa . . . . .	18	.00818	23	.0104
Sycosis . . . . .	16	.00727	9	.0041
Syphilis . . . . .	279	.1268	595	.2070
Tinea Capitis . . . . .	17	.00772	56	.0254
Tinea Circinata . . . . .	22	.01	13	.00590
Tinea Barbæ . . . . .	5	.00227	4	.0018

	Whites.		Blacks.	
	Cases.	Percentage.	Cases.	Percentage
Tinea Versicolor .....	16	.00727	18	.00818
Ulcus .....	2	.00091	7	.00318
Ulcus Varicosus .....	7	.00318	9	.0041
Urticaria .....	38	.0127	62	.0281
Varicella .....	6	.00272	17	.00772
Variola .....	1	.00045	4	.0018
Verruca .....	5	.00227	8	.00363
Vitiligo .....	4	.0018	6	.00272
Zoster .....	28	.0127	31	.01409

Two cases of the following diseases noted in whites—Percentage .00091: Adenoma sebaceum, carbuncle, cyst (sebaceous), erythema nodosum, erythema scarlatiniforme, hæmangioma, nævus unius lateris, papilloma.

Two cases of the following noted in blacks: Angioneurotic œdema, dysidrosis, fibroma, keratosis pilaris, molluscum contagiosum, papilloma, pityriasis, prurigo, scrofuloderma.

One case of the following noted in whites—Percentage .00045: Acne frontalis, acne necrotica, angioma (infectious), balanitis, callositas, fibroma, herpes iris, nævus, onychia, pemphigus, prurigo, pruritus scroti, pruritus vulvæ, purpura (Henoch's), purpura hæmorrhagica, rôtheln, scarlatina, seborrhœal wart, stomatitis, urticaria pigmentosa, verruca necrogenica.

One case of the following noted in blacks: Ainhum, blastomycosis, carbuncle, dermatitis calorica, cornu cutaneum, gangrene, herpes iris, leukoplakia, lichen ruber, lichen scrofulosorum, morphœa, mycosis fungoides, nævus, œdema (wooden), Paget's disease, pemphigus, pruritus ani et vulvæ, purpura (Henoch's), rôtheln, sarcoma, stomatitis, sudamina, thrush, tuberculosis of nose.

That eczema is a common affection in the negro appears from my figures of four hundred and ninety cases in the white and five hundred and twenty-one in the black. It is the most common disease in Martinique, according to Rufz. Twenty-three per cent. of the total number of blacks in my table suffered from eczema. Morison's table gives nineteen per cent. and Dyer's fifteen per cent. for the same disease. It is probable that the presence of mulattoes, influences to some extent, my apparently high figures. The majority of my southern colleagues consider eczema to be less frequent in the negro. Practically all agree that it is less severe. Dr. Carmichael writes, "It is equally frequent, but less severe." Morison finds acute eczema much less severe in negroes, while the chronic form appears

the same as in the white, except that itching is less acute. In answer to the question, "Have you ever seen a case of universal eczema in the negro?" a few of my correspondents have answered in the affirmative. Two of these cases occurred in patients suffering from diabetes.

My table records four cases designated as erythema and erythema hyperæmicum in whites and none in blacks. Erythema multiforme appears twice as common in the white, twenty-one cases being recorded for the former against two for the latter. There are two cases of erythema nodosum in the white and three in the black, and a single case of herpes iris is recorded for each race.

Lichen planus, which from my experience I would have concluded to be fully as frequent in the black as in the white, appears two-thirds as frequent in my figures which show twelve cases in the white and eight in the black. A single case of lichen ruber (the pityriasis rubra pilaris of the French), is recorded as occurring in a negress, no case having been noted in the whites. An illustration showing the papular stage of this rare affection appears in my exhibition of photographs<sup>2</sup>. (Fig. 2.)

A comparative analysis of psoriasis in the two races brings to light some facts that I think are perhaps not generally known. On a number of occasions my father has called attention to the comparative immunity of the negro to psoriasis. At a recent meeting of the British Medical Association, in discussing a paper by Dr. Hyde, he further expressed the view that "possibly the savages of Africa were free from psoriasis on account of exposure of the skin to sunlight, and that the negroes of North America inherited this peculiarity." At the same meeting, Dr. Corlett of Cleveland, stated that he had "never seen psoriasis in the negro, although he had seen many skin diseases in this race." My figures for psoriasis show forty-nine cases in the white and ten in the black. Morison observed twenty-six cases in the white and six in the black, four of the latter cases, however, being mulattoes. Dyer's table gives two cases out of a total of five hundred and fifty-six. Stated proportionally, in ten thousand cases, my figures would have shown two hundred and twenty-two whites and forty-five blacks. Morison's table would have given a hundred and twenty blacks and Dyer's thirty-six. Great as is this disproportion in favor of the blacks, it would certainly have been very much greater if mulattoes could have been eliminated from the

<sup>2</sup> A photographic exhibition of skin diseases in the negro. Shown at the International Congress of Dermatology.

column of blacks. In his entire experience at Martinique, Rufz stated that he never saw a single case of psoriasis in the negro. The question addressed to my correspondents, "Have you seen many genuine cases of psoriasis in full-blooded negroes?" should in the light of my present knowledge, have read, "Have you ever seen a single case?" With two exceptions, all have answered this question in the negative, many volunteering the information that they had seen no cases. "Once only," writes Dr. Grindon, "in twenty-four years of active dermatological practice have I seen psoriasis in a negro, and then I was not absolutely certain of my diagnosis." Dr. Dyer answers, "I have seen but one case of psoriasis in the negro in fifteen years of practice." Dr. Rosenthal writes, "Classifying all negro descendants as negroes, I have six cases in four hundred and eighty. None of these were in the real black kinky-headed African, but all in mulattoes." Dr. Gilchrist answers, "A few cases," and Dr. Brinkley of Savannah, says, "I have not seen a single case or even a condition suggesting psoriasis." In marked distinction to these answers, is that of Dr. Strobel of Baltimore, who states that he has seen "probably twenty cases." I have been unable to learn what proportion of Dr. Strobel's cases were mulattoes. In Morison's experience, psoriasis, when it does occur, is easily cured and does not relapse.

Twenty-five cases of rosacea in the white to one in the black, constitute a ratio that is indeed striking. One case only is recorded in Dyer's tables, while Morison's table of blacks fails to show a single case. While the beginning stages of rosacea could well pass unnoticed, the same would not be true of the latter, especially the hypertrophic stages. Personal observation of negroes upon the street and in the clinic, leads me to the conclusion that rosacea in the dark race is indeed a rare affection.

Sycosis was seen sixteen times in the whites and nine times in the black. One case was recorded in Dyer's and one in Morison's table. I have observed the tendency to the formation of tiny keloidal tumors in several cases of sycosis in the negro, which is not unusual considering the great tendency to keloid of this race.

Urticaria would appear to be the only inflammatory disease of the skin that is considerably more frequent in the negro than in the white, my figures showing thirty-eight cases in the white and sixty-two in the blacks. Dyer's table, however, shows the small number of two cases, while Morison records eleven whites and seventeen blacks. From my experience, I would not consider urticaria of greater frequency in the negro. I feel sure that it is less severe.





FIG. 1.



FIG. 2.



PLATE VIII—To Illustrate Dr. Howard Fox's Article.



FIG. 3.

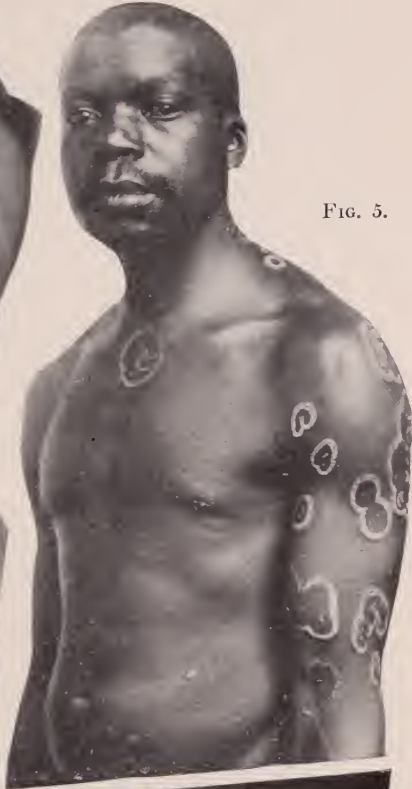


FIG. 5.



FIG. 4.



FIG. 6.







FIG. 7.



FIG. 8.

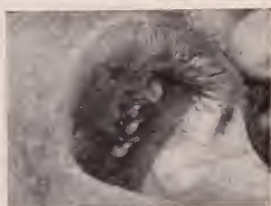


FIG. 9.



FIG. 10.





FIG. 11.



FIG. 12.





Zoster occurred twenty-eight times among the whites and thirty-one times among the blacks. My experience agrees with Morison's statement, that this affection is less painful in the negro.

A study of tuberculosis of the skin tends to strengthen my view that the negro is less susceptible to skin diseases than the white. From innumerable sources it can be shown that pulmonary tuberculosis, and to a less extent other forms of the disease, are more frequent in the negro than in the white race. In view of these facts it may seem strange that my figures for lupus vulgaris, a typical form of cutaneous tuberculosis, record four cases in the white and only half as many in the black. A glance at my column for negroes shows, however, one case designated as tuberculosis of the nose, two cases of scrofuloderma and one of lichen scrofulosorum. Adding thereto the two cases of lupus, a total of six cases of tuberculous affections in the negro is given. This is partly offset by one case of verruca necrogenica in the white column which brings the white total to five cases of tuberculous disease. These revised figures of six blacks and five whites are very small from which to draw conclusions. It seems to me, however, that in view of the great prevalence of tuberculosis in the negro, there should have been considerably more cases of cutaneous tuberculosis. That there were not, appears further proof of a lessened susceptibility of the negro to diseases of the skin.

*(To be concluded.)*

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#### DESCRIPTION OF PLATES.

PLATE VII.—FIG. 1. Keloid. Case of Dr. R. J. Devlin of New York.

FIG. 2. Lichen ruber acuminatus.

PLATE VIII.—FIGS. 3 and 4. Hereditary syphilis, showing the annular form. The mother of this child had also manifested syphilitic lesions.

FIGS. 5 and 6. Acquired syphilis, showing the annular form. Case of Dr. R. B. Carmichael of Washington. Eruption appeared about six months after initial lesion.

PLATE IX.—FIG. 7. Keloid acne.

FIGS. 8 and 9. Leukoplakia buccalis.

FIG. 10. Multiple keloid.

PLATE X.—FIG. 11. Leukonychia.

FIG. 12. Vitiligo.

SOCIETY TRANSACTIONS  
THE NEW YORK DERMATOLOGICAL SOCIETY.

352d REGULAR MEETING, NOVEMBER 26, 1907.

DR. E. B. BRONSON, PRESIDENT, IN THE CHAIR.

**A Case of Perforating Ulcer of the Foot.** Presented by Dr. G. T. JACKSON.

The patient was a man 51 years of age, a widower, who was engaged in railroad work, which required him to be on his feet all day. Both parents died of cancer.

Previous History: Habits, temperate; smokes moderately; no special illnesses. Twelve years ago he froze his right hand. This gave him no trouble until about 6 years ago, when in the winter his hand swelled up and became numb about three times. This was repeated for three winters and then ceased. Has no recollection of freezing his feet. Has had some rheumatic pains. Denies all venereal disease. Three years ago his present trouble began. Two years ago the ulcer was scraped down to the bone and cauterized.

Present condition: The big toe of right foot is swollen and red, and presents on its plantar aspect near its base an ulcer about  $\frac{3}{8}$  inch in diameter and  $\frac{1}{4}$  inch deep, with a callous edge and of inactive character. The patient complains of sharp lancinating pains in the toe which shoot up the leg. These come on in the fall and are repeated about six times during the winter. His heart and arteries seem to be normal. He has slight tremor of hands. His knee jerks are diminished, the right more than the left. He has a slight ataxia, especially marked on standing on right leg. Right pupil irregular on contraction, but responds well to light. Left pupil does not contract as fully as the right.

Dr. FORDYCE said there was no question about the diagnosis. An examination would probably reveal necrosis of the underlying bone. In the majority of cases of this kind the disease of the bone was one cause of the resistance of the ulcer to ordinary methods of treatment.

Dr. JACKSON, in response to an inquiry as to whether the man had any paralytic symptoms, replied that there were slight symptoms of locomotor ataxia, especially in the right leg.

**A Case of Verrucous Dermatitis.** Presented by Dr. G. T. JACKSON.

The patient was a man 30 years old. About 18 months ago he was burned on his left leg with steam. This healed in about 6 weeks. Shortly after its healing the present trouble began as an outbreak of vesicles which broke down and left crusted patches. These have not

been well since. He has a chronic enterocolitis, for which he entered the Presbyterian Hospital. All attempts at cure proving futile, a right lumbar colotomy was done, so that the colon might be washed out. When the wound healed the same kind of dermatitis formed about the scar as was seen on the legs. This yielded kindly to a boric acid ointment. The man showed on the left leg a number of patches about 2 inches in diameter which were elevated, sharply circumscribed, with a well-marked border slightly higher than the rest of the patches. About the patches was a seam of inflammation. Inside of the borders the surfaces were warty in character, uneven, and of grayish green color. The patient complained of slight itching and the patches exuded here and there drops of serum or thick pus. While in the hospital the disease was at one time well under control. He left the hospital and came back in as bad a condition as before. Since then X-rays have been tried, but they seemed to make matters worse.

Dr. KLOTZ suggested the use of applications of some astringent twice a day—a plaster of strong salicylate, together with the wearing of a rubber bandage during the day.

Dr. FORDYCE said the case apparently belonged to the group described under the title of dermatitis vegetans. The case which was demonstrated by Dr. Jackson showed in a minor degree the features which were present in a case reported by Dr. Gottheil and himself about a year ago, in which similar lesions followed a dermatitis herpetiformis. In this case there was a considerable amount of epidermic hyperplasia containing numerous miliary abscesses, each of which was filled with a large percentage of eosinophile cells. The process was autoinoculable and spread by continuity of tissue, and by means of the clothing and finger nails. The culture showed only the ordinary pus organisms, with the staphylococcus aureus predominating. He had seen other cases following dermatitis herpetiformis, leg ulcers, eczemas, etc. It was probable, in his opinion, that the pyogenic organisms were the essential etiological factors acting on a vulnerable or susceptible skin.

In response to an inquiry from Dr. Bronson as to how long the condition had existed, Dr. Jackson replied that he had observed the case for seven months. The patient had come into the hospital on account of his general condition, and he had noted the eruption. He had a very badly nourished skin.

Dr. BRONSON suggested that a thorough curettage under general anaesthesia would be a good preliminary treatment.

Dr. JACKSON said that the lesion had healed almost entirely under rest and a rubber bandage, but when the man got out again on his feet the conditions returned. This particular form of dermatitis he had seen only in people in poor health. This patient was much reduced by his entero-colitis.

### **Necrotizing Chilblain(?) Presented by Dr. H. H. WHITEHOUSE.**

Young man, aged 20. Family history negative. The eruption is of five weeks duration, and is confined to the backs of the hands and fingers, extensors of forearms, and around the rim of each ear. He had a similar attack last winter, which disappeared, leaving superficial scars and a slightly notched condition of the ears. The eruption consists of small indolent nodules, discrete, rounded, dull red in color, with a small de-



pression on their summits. In some, upon removal of a small crust which forms at the apex, there is exposed a loss of tissue with sharply cut outline and perpendicular walls. There is neither itching nor soreness, but the ears are red, hot, and burning beyond the affected rims. When the case was first seen a week ago, one nodule on the finger had enlarged to the size of a small marble and was capped by a black circular necrosed crust,  $\frac{1}{8}$  inch in diameter, but there was no pain nor sensitiveness. It opened and discharged under a salve given by a druggist, and is now subsiding; evidently the lesion had become infected. The peripheral circulation is distinctly impaired, the hands showing evidence of vaso-motor stasis, and the tips of the ears are of a bluish red color. Neither the hands nor the ears, however, have ever been frostbitten, nor has the patient suffered from the symptoms of chilblains.

While the life-history and some of the clinical features are suggestive of multiform erythema, the case is interesting on account of its peculiar localization and the presence of necrosis and scarring. The presenter would like to enter the query whether the diagnosis of necrotizing chilblain could be entertained in the absence of the usual distinctive subjective symptoms of pernio?

Dr. ROBINSON suggested that it might be a tuberculide, but did not care to make a diagnosis without further study of the case.

Dr. MORROW thought it looked more like chilblains than anything else. The fact that there was no definite history of the parts being frozen did not contraindicate the diagnosis.

Dr. FORDYCE said, in his opinion, it belonged to the tuberculide group, as most of the individual lesions were typical.

Dr. WINFIELD thought it might be a necrotic granuloma, although the ear looked decidedly like pernio. He thought that further study of the case, and possibly a microscopic examination, would be required to establish the diagnosis.

Dr. DADE said the ears appeared to him like ordinary chilblains. The lesions on the hands looked like those described as folliclis.

Dr. JACKSON said that the case presented the same appearance as one that Dr. Allen showed before the Society a few years ago, a young man who lived out-of-doors most of the year. Every winter he had the same kind of lesion on his hands that this case presents. The conclusion then reached was that necrotizing chilblains was a proper name for it. Both patients appear to have the chilblain diathesis. The fact that the lesions only appear in the winter is against the tuberculide theory, for tuberculides would appear in the summer as well as the winter.

Dr. MORROW said that the rapid involution and cicatrization of the lesions does not correspond to the history of necrotic granuloma.

Dr. WHITEHOUSE responded that in necrotic granuloma the individual nodules go through a cycle of several weeks' duration from the time they appear to the time of necrosing. After necrosis begins they resolve rather rapidly; while they sink down and recrudescence quite promptly, the growth of the nodule is very slow.

Dr. WHITEHOUSE said that when he first examined the case over a week ago he had made a tentative diagnosis, from the lesions on the fingers, of tuberculide or necrotic granuloma from the appearance of the nodules themselves, but upon a more careful study of the case,—considering the peculiarity of the localization on



the tips of the ears, and the short duration of the cycle of development of the individual lesion, and its appearance only in the winter time,—he was inclined to think that the peripheral circulation was a contributing factor in the etiology, and was therefore about willing to withdraw his former diagnosis of necrotic granuloma or tuberculide. When he had spoken of the man's having no subjective symptoms of chilblains, he meant that he had had no tingling, burning, or erythematous area, such as are seen in connection with ordinary chilblains, which usually appear independent of any freezing or the parts having been touched by frost. At the tip of each lesion there is a crust, and when this was taken off from a lesion on the edge of the ear a sharply cut excavated ulcer was revealed—yet within a week, without any other treatment than rhubarb and soda internally, this sharply cut ulceration had healed and almost disappeared, leaving only a partial cicatrix. In consequence of the life history of each individual nodule being so acute and short-lived, and this fact, considered in connection with the other characteristics mentioned in the case, impressed him as being a peculiar type of necrotizing chilblains. He very much questioned if there was any tuberculide element in it.

Regarding the differential diagnosis of necrotizing chilblains and the so-called tuberculides. Dr. Fordyce did not think the two conditions could be differentiated by the rapid or slow evolution of the lesions, as with the same etiological factor we may have an acute or chronic condition depending on the activity of the agent producing the disease or the resisting powers of the tissues.

Dr. BRONSON said that he had never seen such punctate lesions occurring in chilblains.

Dr. WHITEHOUSE replied that it was not usual, and that seems to constitute the peculiarity of this case.

Dr. FORDYCE said he had under observation a similar case of necrotizing granuloma persisting for years. He had cut out one of the lesions and there was a distinct fibrous growth. It looked as though there was some toxin eliminated by the sweat, as the process apparently took its origin about the coil.

Dr. WHITEHOUSE said that one matter which he had not dwelt upon was the scarring in relation to its being a tuberculide. The scars on the forearm are rather superficial and flat—they are only slightly excavated, and are not deep or pitted like the scar found in the usual type of tuberculide.

In response to a query from Dr. MORROW as to whether the spontaneous disappearance of the lesions corresponded with his idea of the tuberculide, Dr. Fordyce replied in the affirmative.

Dr. DADE called it *lupus verrucosus*.

Dr. FORDYCE suggested *lupus vulgaris* with certain verrucose lesions.

Dr. KLOTZ agreed with the diagnosis of *lupus vulgaris*. The lesions have not the well defined outlines of *tuberculosis verrucosa cutis*.

Dr. MORROW preferred to call it *lupus vulgaris*. The lesions are not pronouncedly verrucose, and the verrucose element noted might be to a certain degree determined by their localization.

Dr. ROBINSON suggested that it might belong to the tuberculous *lupus vulgaris* variety in which there is a certain amount of verrucose growth, but not to the typical verrucose *lupus*, for here you see the nodules deep in the skin, which is not the case in the ordinary tuberculous type.

Dr. WHITEHOUSE said that it appeared to be a tuberculosis, and he had favored that diagnosis when he presented the case, but did not feel inclined to place it in the category of *tuberculosis verrucosa*. The crusts which to-night looked verrucose, in the day appeared flat and laminated. The point which Dr. Robinson had made of the different nodules forming patches was well taken. While considering it a tuberculosis of the skin, after studying all the characteristics of the lesions he had not felt inclined to regard it as *tuberculosis verrucosa*.

of Reihl and Páltauf. The cases of disseminated tuberculosis that he had seen following measles had lesions in the form of small nodules, and not in large patches as in this case.

**Case for Diagnosis.** Presented by Dr. H. H. WHITEHOUSE.

Charles McG., aged 7; a fairly well nourished boy in good general health. Father living and well; mother died two years ago of heart trouble and bronchitis. No history of tuberculosis or syphilis in immediate family or family of either parent. Patient is oldest of three children, one of whom died of measles two years ago. The other is living and well, five years of age. There were no miscarriages. The present eruption followed the measles  $1\frac{1}{2}$  years ago, beginning as a papule on the back of the left hand. This increased in size, others developing around it, forming a patch  $\frac{1}{2}$  an inch in diameter. Other smaller and larger patches developed in the same manner, to the number of five or six on both forearms, chiefly on their extensor surfaces, but only one extending above the elbow. There is an ill-defined patch in one palm, a patch on each knee and one on the foot. There are no subjective symptoms, the lesions being neither sore nor painful, and are free from itching. There is slight submaxillary and cervical adenopathy.

The patches are from one-half to one inch in diameter, irregularly circular, oval, or partially crescentic in outline, raised  $\frac{1}{8}$  inch above the surface, dull-red in color, and covered in places with thick laminated adherent crusts. Upon removal of these, small bleeding depressions are revealed, but no distinct well-defined ulceration. There is no evidence or history of pustulation, and while the patches have a rather uniform, flat surface, they are apparently made up of individual large papules or small tubercles. Pressure with a glass reveals a translucency suggestive of tuberculosis.

**Epithelioma of the Nose and Cheek.** Presented by Dr. ROBINSON.

Case of epithelioma occupying the greater part of the left cheek, left side of nose and inner canthus region. Commenced 15 months ago near canthus. Is a rapidly spreading cancer. Treatment to be followed is first caustic potash in paste form to remove a large part of the cancer mass and then an arsenious acid paste for destruction of the peripheral pathological tissue. The case will be difficult to cure, but such measures seem to him to be the only ones available. Excision is out of the question.

Dr. MORROW said that he hoped Dr. Robinson would succeed in getting a good result, and that he would like to see the case again at the next meeting. He had always found caustic potash a very difficult application to control, as one cannot regulate the depth and extent of its destructive action so well as that of other caustics. Another objection is that the pain is considerable. According to his experience, chloride of zinc, either in solution or combined with other agents in the form of a plaster, is the most manageable and dependable application that can be used. He had treated cases of epithelioma on this theory for

25 years, and still clings to it as the preferential agent when a caustic application is indicated.

Dr. JACKSON said that he had recently treated a case with arsenical paste mixed with orthoform, with no pain whatever, though the paste was left on for eight hours; but about the third day the patient began to have a temperature, which went up to  $101^{\circ}$  in the morning, falling to  $100^{\circ}$  at night. She did not feel ill, and had apparently no symptom of arsenical poisoning.

Dr. ROBINSON said that he had simply showed the case in order to give the line of treatment in this particular case, and to show the difference between the real size and the apparent size of the lesion. The surgeon scarcely ever gets in far enough, and the disease reappears. As regards the application he does not ordinarily use caustic potash, but he began with this on the lower part of the cheek and got off very large masses in a very short time. The application was not made for more than 20 minutes. He had seen it used as long as 10 minutes without pain. Although it is not so easily controlled as arsenious acid or some of the other acids, he did not believe that a case like this could be successfully treated with any caustic that will act in the manner of chloride of zinc, giving dry necrosis. He depended rather on getting a sero-tactic action so that the part will be filled with serum and get an action beyond the part that will be completely necrotized. Potash and arsenious acid will do that, but you get a greater destruction with potash, though you have to be careful. He used the potash to get the large masses off, and lower down he used the arsenious acid, and left it on long enough to get a very destructive effect. You cannot get a good result without a great deal of swelling. Depend upon the inflammatory action as well as the necrotic action and the special reaction from the agent. He would be glad to show the case again later.

As regards the rise in temperature, he had never made any observations, so he could not say anything on that point. He had, however, never seen any ill effects from it in the many times he had used it.

Had the patient been a private one perhaps he would have used chloride of zinc. He uses that in the office to destroy large masses and afterwards cuts off the mass easily. So far as the question of pain is concerned, he does not object to that. Anything that helps to intensify the inflammatory process is desirable.

Dr. MORROW said that he can get all the inflammatory action desired with chloride of zinc. It depends upon the thickness of the patch and the duration of the application. Arsenic, if used sufficiently strong, would affect the healthy tissues. Its so-called elective action upon diseased tissue is no more pronounced than that of certain other agents.

Dr. ROBINSON said that he had had a case in which there were quite a number of epitheliomatous areas, but only a few that were recognized objectively. He had applied arsenious acid paste over the whole cheek and had a photograph taken afterward showing where it had picked out every epitheliomatous area. That is a clear proof of elective action. Caustic potash will do the same thing if used in a diluted form. The destructive action is greater in pathological tissue than in normal tissue. He did not think the patient's eye would be lost. He had had a case some time ago which recovered with a perfect canthus, although the disease had already invaded it.

**Case for Diagnosis.** Presented by Dr. G. T. JACKSON.

Woman of middle age. This lesion has been present for about a year. She states that at first it itched a great deal, but has not spread since it first appeared. The lesions appear chiefly on the legs over the shins and thigh. In the hollow of each hip there is a patch with a lot of little



spinous processes. On the legs the lesions are isolated and in streaks. They are primarily red papules located in the follicles of the skin. Here and there are some flat papules of the lichen planus type. There is a distinct roughness of the skin of the affected parts.

Dr. ROBINSON said that it was certainly an unusual and very interesting case. While some of the lesions on the leg looked like lichen planus, there were not many such. One often sees follicular lesions of the extremities very much like lichen planus, but if watched carefully one will see that it is of short duration, whereas lichen planus will go on for months. Taking all the lesions under consideration, however, he could not make a diagnosis of lichen planus here, for the follicular keratotic condition is very marked. There are quite large areas with the spinous processes. It is not in the right place for pityriasis pilaris. The lesions on the leg are larger than would be found with that trouble. It was not the keratosis pilaris follicularis of Brooke, although it comes nearest to that, and he would call it that if anything, although there seems to be too much redness and inflammation for that disease.

Dr. MORROW thought it a case of lichen planus. The objective characters of lichen planus are so extremely diversified and embrace so many features that do not correspond in every point to the typical picture, that it would be perfectly safe to include this case under that category. It certainly is not a case of lichen rubra, or the lichen pilaris of Devergie. Some of the lesions below the knee and on the thigh were so characteristic of lichen planus, though perhaps not quite so angular in outline, that he would not hesitate to call it lichen planus. The keratotic condition is rather unusual, but then unusual features are often seen in lichen planus.

Dr. KLOTZ agreed that it seemed to have many of the features of lichen planus, but it has not the bluish color nor the firm induration usually seen in lichen planus of so long duration.

Dr. FORDYCE said the case was a rare one, and it was difficult to place it in any well-defined group of skin diseases. All of the lesions, in his opinion, were of the same nature. On account of the follicular seat of the lesions he would rule out the diagnosis of lichen planus, although some of the scattered non-follicular papules strongly suggested that diagnosis.

Dr. DADE thought there were two distinct diseases present—the lesions along the front of the legs he took to be plaques of lichen planus becoming hypertrophied and warty; there were papules of undoubted lichen planus higher up near the knee. The intense itching the woman complained of when seen at the clinic would be in accord with this view. The group of papules on both hips and along the borders of the popliteal spaces he took to be the *lichen pilaris* of Crocker, and which Crocker speaks of as occurring in just these regions, associated with lichen planus. Each of these papules has a distinct horny spine protruding from it, and the hand receives the characteristic nutmeg grater sensation when passed over the lesions. There is none of this feeling when the hand is passed over the line of lesions running up the front of the legs. Dr. Jackson is perhaps thinking of keratosis pilaris when he says these papules are too red. *Lichen pilaris* of Crocker is a distinctly inflammatory disease, and the papules are red at first, and only become paler and near the color of the skin after they have existed for some time.

Dr. WHITEHOUSE said that he had nothing to add to the suggestions that had been made. All had observed the two distinct types of lesions—one a follicular keratosis and the other a lichen planus type. As Dr. Robinson had remarked, there are so many eczemas, etc., where the angular flattened papules exist, that such lesions do not necessarily constitute a lichen planus. Most of the lesions



are follicular, and he was inclined to consider it a lichen pilaris, with secondary plane lesions, but not necessarily an accompanying lichen planus.

Dr. JACKSON said that he did not think it was lichen planus. The presence of a few flat papules does not establish that diagnosis. The color was not that generally seen in lichen planus. He thought that there was only one disease. Over the shins the skin is very rough—almost as rough as in the hollow places of the thigh, where the little spines are found. At first he had thought of lichen pilaris of Crocker, but was inclined now to call it keratosis follicularis, though it was not a typical case.

### Epithelioma Successfully Treated by X-Ray. Presented by Dr. J. A. FORDYCE.

The patient was a woman about 45. She had had an epithelioma of the upper lip extending to the angle of the mouth and lower lip which had existed for 16 years. It was probably of the rodent ulcer type and was of considerable interest on account of the rarity of epithelioma of the lip in women. The lesion had responded rapidly to X-Ray treatment, as after 14 exposures, 6 of 3 minutes' duration and 8 of 5 minutes' duration, the ulcer had healed, the infiltrated margin had disappeared and nothing was left excepting a small nodule embedded in the lip at the extreme right of the lesion. This nodule had evidently not been included in the area treated by X-ray.

Dr. ROBINSON said that it certainly was a most excellent result. In his case he did not think the X-ray would give such a good result. It was entirely different in its origin and the etiological factors were probably different. In my own case, after I get the tissues well injured by the caustics I expect to use the X-ray, but not otherwise, for the growth is too rapid to expect much from the X-ray treatment. It is in the slow superficial growths and rodent type where it is most useful. In Dr. Fordyce's case there was still a little of the growth in the corner. This is deep-seated and covered with apparently normal epithelium, and I doubt if the X-ray will prove effective in that part.

Dr. WHITEHOUSE said that as far as it had gone the case furnished one of the best results from the X-ray that he had seen. He would like to ask if the nodule remaining in the right corner of the mouth would militate against the characterization of the whole process as a rodent ulcer—whether such a lesion would be expected in connection with a rodent ulcer, and whether it would be expected that this part still remaining will yield to the X-ray as the rest had done? He was inclined to think that it would not.

Dr. JACKSON said that a cure in 14 exposures is very rapid indeed. In his experience it had usually taken many more.

Dr. FORDYCE, replying to the remarks in regard to the nodule, said that in his opinion it would not yield rapidly to X-ray treatment. The simplest way to get rid of it would be to excise it. He regarded the original growth as a rodent ulcer on account of the primary involvement of the skin at a distance from the muco-cutaneous juncture. Many surprises were met with in treating epitheliomas by the X-ray. He had now a patient under observation whom he had treated for a number of years for rodent ulcer of the inner canthus. At first the lesion yielded very quickly, but after a number of months it returned, then yielded and again relapsed. Each relapse was more severe than the original condition. Now he had an extensive ulceration involving the skin about the orbit which has practically destroyed the eye. It would seem that in such cases the continued use of

the X-ray renders the tissue more vulnerable to carcinomatous invasion; in other words, that the epithelioma becomes more malignant after the X-ray is pushed too far. The efficacy of X-ray in preventing a recurrence of epithelioma would seem to him of doubtful value. It has its special indications in epitheliomas of very superficial extent.

**Case of Parasitic Dermatitis, Resembling a Syphilide** Presented by Dr.

A. R. ROBINSON for Dr. ORLEMAN ROBINSON.

A woman, aged 40 years, with slight seborrhœal eczema of scalp, pediculosis capitis, and an eruption on the neck. On account of the resemblance at first sight to a papular syphilide, the case was shown. The lesions were pea sized, sharply limited, reddish in color, elevated like a papular syphilide and markedly grouped. There were about 20 lesions on each half of the neck. A few scattered lesions were present on the rest of the body. There is no history of syphilis. I have seen cases with some resemblance to this one in connection with pediculosis capitis in elderly persons.

Dr. KLOTZ said that the peculiarity of the lesion suggested that some contamination might have taken place by some application to the throat, possibly a simple wet dressing. The neck is very rarely affected by such an eruption.

Dr. ROBINSON said that he had shown the case on account of its unusual character. A close examination in the day time shows a peculiar condition. A serous transudation has evidently taken place into the epidermis and broken up the cells. In other words, there seems to be an eczematous process. She has some seborrhœa of the scalp, and has pediculosis. He had excluded ringworm. He was satisfied that if Unna saw this case he would put it in his class of seborrhœal eczema. He himself was inclined to call it an eczema of parasitic origin, but not an eczema seborrhoicum.

Dr. WHITEHOUSE said that the lesions seemed to be very indefinite and difficult to diagnose. She seems to have no seborrhœa in the scalp to speak of. Dr. Robinson had spoken of it as being of a distinctive catarrhal type. He did not feel inclined to put it in the category of a seborrhœic dermatitis, but would not care to pronounce an opinion upon its exact nature without further observation of the case.

Dr. DADE said he would hardly call it a dermatitis seborrhœa, if that is what Dr. Robinson means when he speaks of it as being a seborrhœal eczema. The scalp is perfectly clean and free of scales, and the lesions themselves too red and too free from greasy scales to warrant this diagnosis. The spots in a group confined almost to the left side of the neck look pretty much as if self-inflicted.

**Case of Atrophy and Deformities of the Extremities Following Universal Scleroderma.** Presented by Dr. FORDYCE.

The patient was a young man 25 years old, a native of Ireland, who had been presented on two former occasions by members of this Society, when certain doubts had been expressed as to the exact nature of his malady. About 12 years ago the patient stated that he had swelling and rigidity of the extremities and face. About that time he was seen by Dr. Crocker of London, who made a diagnosis of generalized scleroderma. After a number of years the thickening of the skin over

the extremities was followed by atrophy and contractures of the fingers and toes. At the present time the skin of the lower extremities was somewhat thickened.

Dr. ROBINSON said that he did not regard it as a pure case of scleroderma. He had observed it for a good many months. The case had been shown before at this Society both by Dr. Fox and himself. Crocker, who saw the case first, regarded it, according to the patient, as an unusual case of scleroderma, on account of the commencement as a diffuse oedema.

While in the hospital a biopsy was made by the pathologist. He failed to find any evidence of tuberculosis, or blastomycetic dermatitis. The latter was specially looked for.

The patient was presented for suggestion as to treatment as well as for an opinion as to the etiology of the affection.

Dr. ROBINSON suggested that anti-parasitic applications and astringents would be the proper treatment.

Dr. JACKSON replied that they had tried boric acid, tar, and salicylic acid. Nothing seemed to do any good but keeping quiet and snug bandaging.

Dr. ROBINSON said there seemed to be some pyogenic organism present, probably staphylococci. Anti-parasitic agents with bandaging seemed to help some. He generally found white precipitate ointment the best application. Most of these cases require attention to the ground, as tonics, etc.

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## MANHATTAN DERMATOLOGICAL SOCIETY.

59th REGULAR MEETING, APRIL 5, 1907.

DR. EDWARD PISKO, PRESIDING.

### **Tuberculosis Cutis. By Dr. ROBERT ABRAHAMS.**

Female, 10 years old; tubercular family history. When 7 years old mother noticed some "swellings" on both legs, which increased in size and finally broke open. After a month or two these finally healed, but the skin over the places never seemed natural. At the present time, with the exception of some seborrhœa and the usual pediculosis of the scalp, there are no cutaneous lesions anywhere above the thighs. On both of these latter there are irregular, thickened, purplish patches, with roughened surfaces and markedly raised above the surrounding structures. The margins of each of them is sharp and well defined, and they are soft and doughy to the touch. On the legs are seven similar patches with fairly deep ulcerations occupying their centers or the greater part of their areas.

The ulcerations are irregular, with markedly undermined edges with a dirty brown and yellowish serous exudation, or in some places yellowish, readily detachable crusts. Scattered amongst these developed lesions are small indurated painful inflammatory lesions, with distinct beginning necrotic areas in their centers. These nodules are to be regarded as the initial lesions, which later go on to form the ulcerations and terminate in the bluish, doughy, elevated masses above mentioned. The subjective symptoms are limited to moderate discomfort and some pain. The



patient has been under treatment of various kinds ever since she has had the affection without, however, any benefit.

In the discussion most of those present considered the lesions due to secondary pyogenic infection (*Ecthymata*) in a case of chronic urticaria. Some lesions of this latter type were present at the time of presentation, but the president stated that they were the first of the kind he had seen, though the patient had been under observation for some time.

#### **Acne Keratosa.** By Dr. W. S. GOTTHEIL.

Ida P., 11, Russian, here 5 months. Has suffered from the eruption since infancy; it has varied in severity at times, but has never entirely disappeared. Individual lesions last a long time (weeks or months), and then dry up, their hard tops fall off, and occasionally leaving a mark. General health fair, internal organs free. History defective, the child being an orphan.

Scattered over the body are several hundred lesions, grouped in certain localities, and identical in appearance though varying in size. The smallest are less than a pin-head in size; the largest as big as a French pea. They are circular acuminate papules of a dull red color, on a normal skin base, and with a hard, yellowish brown plug in their center. The largest papules tend to become irregularly circular or oval; and the central plug is large and hard. Even the smallest papules show this central plug, removal of which leaves a cup-shaped glistening depression, and usually there is no pus. A characteristic feature is the formation of a lesion of precisely similar character, with reddened base and central hard plug, wherever there have been accidental lesions, such as scratches; these lesions assuming the elongated or irregular shape of the traumatism.

The eruption is fairly well distributed over the body, but the papules are distinctly grouped in certain places. The larger collection of them is on the upper buttocks on both sides, where there are a hundred or two, mostly small in size. There are a fair number on the outer surface of the thighs and some on the lower legs, especially about the ankles. The center of the back is free, but the shoulders and the skin over the shoulder blades show large groups of lesions. There are a few on the upper anterior chest area, and more of them on the lower abdomen. The arms are markedly affected, especially the extensor surfaces; there are some on the flexor aspects, and many on both surfaces of the wrists; there are a large number of characteristic lesions on the back of the hands. There are a few scattered over the face, as well as some scars that may have been the result of previous, possibly infected lesions. Palms, soles and the scalp are free.

In 1904 I described two cases of this affection, which is identical with the *acne cornée* of Hardy, and Leloir and Vidal, the *acne keratique* of Leredde and Tenneson, and possibly the *keratosis follicularis contagiosa* of Brooke. It differs from the ordinary *lichen pilaris* or spinu-



losus in that the hyperkeratosis affects the sebaceous glands proper rather than the hair follicles, and that the chronic inflammatory process is much more marked than in the pilous affection. In fact the microscopic examination in my earlier cases showed that the excretory ducts of the sebaceous glands were chiefly affected; the distended duct forming a sack that was pointed below and broad crateriform and filled with masses of imperfectly cornified epithelial cells above. The sebaceous cells of the secreting portion of the cells below were compressed and atrophic.

The chronic inflammatory process affecting the sebaceous glands seems to be more nearly related to an acne than to a pure keratosis; and it may be related also to the so-called cutaneous horns. In one of my earlier cases, at all events, the keratotic plugs at one or two places formed distinct though minute horny excrescences. Future study must decide whether it has any connection with acne necrotica or the tuberculides.

In the discussion Dr. Weiss drew attention to the fact that this affection had been given many names, of which he personally preferred that of keratosis follicularis. The reporter noted that some cases that resembled this one in all essentials had lately been described in the *British Journal of Dermatology* as lichen spinulosus. It was interesting to note that the occurrence of these glandular inflammations with the formation of keratotic plugs seemed to be a matter of congenital predisposition. In this case, as in the other previously recorded, a scratch or other irritation would bring out similar lesions; so that a row of inflamed glands with plugs always resulted in the formation of a row or group of lesions. The treatment had consisted of curetting the lesions and the subsequent application of a bland ointment. Dr. Cocks recommended the X-ray, under which he had seen several cases markedly improved.

**Case for Diagnosis.** By Dr. M. B. PAROUNAGIAN.

Mrs. M. D., American, age 30, married.

**Family History:** Father died of pneumonia at the age of 50, mother died of uterine cancer at 45, one brother and sister living and both in good health.

**Personal History:** Married 6 years, no family, has never been pregnant, menstruation regular, no history of lues. She states, she has always been well and never had occasion to consult a physician, though, she has slight cough.

**Present Condition:** Started about a year ago, in the form of a small purplish discoloration or "spot" as she calls it; on the forehead about  $\frac{1}{2}$  inch above the left eyebrow, two more spots appeared almost forming a triangle. They disappeared some time later and new lesions appeared at about the same region, the next lesion appeared on the right cheek about an inch from the outer edge of the right eye, this was about last September or October, 1906, this lesion, which she also describes as purplish discoloration, grew larger and larger, extending downwards, covering an area of about 2x2 inches. When I first saw the case at the Post-Graduate on Feb. 27th, 1907, the base of the lesion was quite red and angry looking, scattered all through, with large nodes and nodules, some hard and some soft, somewhat scaly. There is another lesion on

the left side at the angle of the jaw, which is a distinct nodule, quite hard; the lesions are not painful, only upon pressure, no other lesions on the body, mouth or throat, the inguinal lymphatics are enlarged. She improved somewhat under mixed treatment and islands of apparently healed areas are quite noticeable.

Dr. Oulmann regarded the case as one of *acne indurata*, on account of the persistent, deep-seated nodules, as did Drs. Cocks, Bowman, and Abrahams. Dr. Weiss regarded it as a case of tubercular infection, a *lupus tumidus*, diascopy showing what he considered to be distinct nodules. Dr. Oberndorfer concurred, noting its resemblance to the *gommies scrofulieuses* of the French writers. Dr. Pisko regarded the lesions as those of a tubercular syphiloderm. Dr. Geyser was in the habit of using the X-ray as test in doubtful cases; if the lesions were tubercular they were benefited; if they were syphilitic they got worse. Dr. Parounagian, in closing, said that the large, indurated, non-suppurating lesions were not characteristic of *acne*. She has had one raying, which had aggravated the condition. On the other hand, the patient was considerably improved by mixed treatment, which she took for a month. He is therefore inclined to regard the case as one of tertiary syphilis.

#### **Carcinoma Linguae.** By Dr. L. OULMANN.

R. R., 66, noticed 6 months ago a swelling in the right side of his tongue, which extends in time upon the mucosa of the base of the mouth and the wall of the maxilla on that side. The submaxillary glands became affected. Three months ago the anterior third of the right side of the tongue was removed, with the floor of the mouth and the submaxillary and other neighboring glands, after the extraction of the lower teeth of that side. Three weeks after the operation the patient noticed that his tongue had begun to swell up again; there was much pain, and he was unable to speak distinctly.

Status Præsens: The right side of the tongue is shorter than the left, and it contains a hard, walnut-sized tumor and is adherent to the lower maxilla and the floor of the mouth. From the outside of the jaw the tense infiltration of the whole floor of the mouth can be plainly felt. No glands. There are also two excrescences of the mucosa over the affected area, one of which is soft, partly ulcerated and bleeds easily and other harder and less vulnerable.

#### **Benign Papilloma of the Tongue Coincident with Extensive Leukoplakia.** By Dr. L. WEISS.

B. L., male, 40; no history of syphilis. Five or six years ago, after excessive smoking, noticed fissures of the tongue, which disappeared with the discontinuance of his tobacco, but his tongue has always remained sensitive to the effect of that irritant. Four months ago began to have pain in the region of the inferior maxilla and a small nodule appeared along the right border of the tongue; this soon became larger, until now it is the size of a 5 cent piece. The mass is hard, circular, elevated about one-quarter of an inch above the general surface of the tongue; there is no induration of the base of the tumor or of the tissues

of the tongue itself. There are several patches of characteristic leukoplakia on the surface of the tongue, but nothing of the kind at the site of the lesion described. Although the relationship of leukoplakia and carcinoma is well established, and some forms of malignant growth are distinctly papillomatous, the character of the growth in this case and the fact that the leukoplasic patches though near, are entirely distinct from it, justifies the diagnosis of a benign papillomatous growth.

**Chronic Dermatitis with Commencing Atrophy.** By Dr. L. WEISS.

Mrs. B., Austrian, 45; excellent general health. Her ailment dates back two years and affects the hands alone; she attributes it to exposure to fire and stoves incidental to her occupation of cook. She states that her trouble began with the appearance of small purplish areas on the backs of her hands. These have been spreading peripherically ever since; until at the present time the entire skin of the backs of the hands, from the tips of the fingers to the wrists are affected. These areas are purplish in color, and with an integument of extreme thinness; so much so that it resembles crumpled up cigarette paper. The upper margins of the affected areas are extremely well defined, so that there is a distinct line beyond which the skin is entirely normal.

The case was generally regarded as one of a chronic low grade dermatitis, possibly the preliminary stage of an atrophy.

**Case for Diagnosis.** By Dr. B. F. OCHS.

L. K., 24. Three years ago had a "ringworm" of the body, treated with Tr. of iodine; at the same time she noticed that the nail of her left little finger became yellowish in color and began to crack easily. At the present time she has an-acne and a well-marked pityriasis versicolor of the chest. The condition of her nails is as follows: left hand, thumb nail normal; index finger nail spoon shape, yellowish and studded with white spots. The middle finger nail has a depressed whitish furrow running across its middle; and the other two nails of that hand are ridged and present a worm-eaten appearance. All the nails are thickened and break off easily in a lamellar manner. Right hand: nails all more or less affected in similar manner to the left, but less markedly so. Nails of the feet unaffected. Examination of the scrapings and fragments of the affected nails has not revealed the presence of fungi. In spite of that fact, however, the speaker is inclined to consider the affection as parasitic. It presents none of the characters of syphilitic nail disease and a vigorous course of antileptic treatment has no effect on it. Psoriasis has been considered, but there is absolutely not a single lesion of the disease anywhere else on the skin. In the discussion that ensued the general opinion was that the affection was probably parasitic.

M. B. PAROUNAGIAN, M. D., Secretary.



# REVIEW

## of

### DERMATOLOGY AND SYPHILIS

Under the charge of A. D. MEWBORN, M. D.

#### Radiotherapy and Phototherapy.

By G. H. STOVER, M. D., Denver, Col.

Value of the High Frequency Spark as a Local Application. REGINALD MORTON, *Lancet*, June 1, 1907. In the treatment of alopecia areata Dr. Morton applies a resonator current through a vacuum tube until erythema is produced, and states that success with this method is in direct proportion with the readiness with which the erythema can be brought about. He finds that the application of the resonator spark directly from a metallic electrode causes the disappearance of acne papules after half a dozen treatments. In his treatment of port wine marks by this method a hot, white, resonator spark is applied for several minutes until the surface has a vesicated appearance; in about eight days desquamation occurs, leaving a normal skin surface.

Phototherapy. SCHAMBERG, *Jour. A. M. A.*, Vol. XLIX, p. 549, in a valuable paper, after a consideration of the subject in general, including a description of several forms of apparatus, relates a number of cases treated by him with the mercury vapor lamp, and states as his conclusions that the mercury vapor lamp is capable of accomplishing good in alopecia areata, leg ulcers and certain forms of eczema.

Acne and Chronic Eczema. RUSSELL H. BOGGS, *Jour. A. M. A.*, Vol. XLIX, p. 735. This writer is convinced of the value of Roentgen therapy in the conditions named; he prefers a soft tube, as a rule at a distance of about ten inches from the skin; in the milder cases of acne the ordinary methods of treatment are first used; if not successful he proceeds with Roentgentherapy; in pustular and indurated acne the Roentgen ray is applied at once without wasting time over other methods. He does not use Roetgentherapy in acute eczema except for the relief of excessive pruritus; he finds his best result in squamous eczema.

Superficial Malignancies, *Calif. State Jour. Med.* Aug. 1907. Soiland illustrates his article on the use of the Roentgen ray in superficial malignancies with some very convincing reproductions of photographs.

At the the July, 1907, meeting of the Electrical Section of the British Medical Association, Dr. James Taylor, of Bristol, reported a case of Paget's Disease in which the superficial ulceration healed readily under Roentgen therapy, but during treatment a malignant mass developed in the substance of the breast, necessitating the removal of the organ.



Electrical Treatment of Pruritus of the Vulva and Anus, *La Clinique*, May 17, 1907, Noiré states that a very few applications of the Roentgen ray have been successful in his hands, where the use of static and high frequency currents had failed. The applications are made at ten-day intervals.

Enlargement of Vessels Resulting from Exposure to Roentgen Rays. AXMANN, *Munch. Med. Woch.*, Vol. LIV, No. 38, states that energetic exposure to ultra-violet light will remove the telangiectases resulting from prolonged radium therapy. This is perhaps in line with the experience of certain radiotherapeutists who believe that they are able to minimize the danger of dermatitis after Roentgen therapy by making frequent applications of arc light to irradiated areas.

The Protection of the Roentgenologist. *N. Y. M. J.*, Vol. LXXXVI, No. 20. Dr. C. L. Leonard. This conservatively written paper brings out in an impressive manner the dangers that many roentgenologists are thoughtlessly undergoing, and carefully considers the methods used for avoiding these dangers. The conclusions he arrives at are here given:

1. That much of the seriousness of Roentgen operators' lesions has been due to meddlesome surgery and medication.

2. That this has resulted from an inappreciation of the character of these lesions.

3. That their course and clinical character, as well as experiment, have shown that they are due to injury to trophic nerve, decreased nutrition and blood supply.

4. That the area involved extends wide of the visible lesion and hence reparative processes cannot follow local surgical interference or stimulant medication.

5. That the first principle of treatment is to avoid all further depression and injury to local nutrition, and increase systemic tone.

6. That the best local treatment is to let the lesions alone and protect them from further irritation.

7. That the best treatment is prophylactic and therefore the protection of the operator should be carefully studied.

8. That the best method of protecting both operator and patient is to confine the radiations to the area to be examined or treated.

9. That this can best be accomplished by surrounding the tube or source of all radiations by sheet lead of sufficient thickness, or the weight known as six pounds to the square foot over the active hemisphere of the tube.

10. That the entire tube should be enclosed in a box of sheet lead having diaphragms of varying size through which alone the rays are permitted to pass.

11. That this material can be employed by having an air insulation

of four inches on each side of the tube or a total of six inches, which gives a sufficient working variation for the internal resistance of the tube.

#### GENERAL RÉSUMÉ BY THE REVIEWER

The Roentgen ray as a therapeutic measure seems to have well established itself, and to occupy a larger field at the close of the year than at the beginning. The literature of the year, while quite extensive, is on the whole of a very conservative and credible type. The unreasonable statements and unbelievable reports of early years (though really comparatively few in number) have practically disappeared, and Roentgen therapy is being handled in a scientific manner. Radiography and radiotherapy are more and more every year tending to become a specialty, and must, from the nature of the work itself, be such. An agent, the effects of which upon the tissues are so definite and so powerful, and the ill effects of which, when improperly applied, are so irremediable, must of necessity be used only by those who thoroughly understand it. Proper use of the Roentgen ray, based upon a knowledge of the pathologic condition it is desired to affect, and upon a knowledge of the physiological action of the ray on normal and abnormal tissues, will be followed by uniformly successful outcome.

The three greatest needs in this branch of medical science are, first, a convenient and uncumbersome method of protecting the patient; second, a convenient and uncumbersome method of protecting the operator, and third, a convenient and uncumbersome method of measuring the dosage in standard units.

#### OBITUARY.

Adrien Doyon, the founder of the "Annales de Dermatologie et de Syphiligraphie" has recently passed away at the advanced age of eighty years. His perseverance, ability and force of persuasion contributed more, perhaps, than the work of any other man in making the "Annales," founded in 1868, one of the best as well as one of the oldest dermatological journals in the world. His translations of the works of Hebra, Kaposi, Neisser, Auspitz, Finger, etc., and his indefatigable labour in reviewing the innumerable productions of German science has undoubtedly aided in stimulating the young workers in this field in France to win back from Vienna the prestige of Paris as a Dermatological centre.

The writer made his acquaintance at the elbow of Sabouraud where Doyon frequently came to follow the Paris clinics with all the interest of a beginner. And it was with true regret that his absence prevented a renewal of his acquaintance at Uriage-les-bains upon a visit made by the writer in the spring of 1900. The high esteem of these baths in the treatment of cutaneous and specific affections was largely due to his writings and to the confidence of the profession in his ability and honesty.

A. D. M.

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## IDIOPATHIC MULTIPLE HÆMORRHAGIC SARCOMA (KAPOSI)

By M. B. HARTZELL, M. D.

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Read before the Sixth International Dermatological Congress, New York, September 9-14, 1907.

IN 1872 Kaposi<sup>1</sup> first called attention to an unusual and remarkable affection of the skin characterized by the occurrence of deeply pigmented infiltrated patches and small tumors, situated almost invariably on the extremities, followed after several years by visceral metastases and death, for which he proposed the name "idiopathic multiple pigmented sarcoma," a name which he, twenty years later, changed to idiopathic multiple hæmorrhagic sarcoma, as being more accurately descriptive of the disease. At the time of this first communication he had seen but five cases, but this number had increased to twenty-five up to the time of the publication of the last edition of his well-known treatise on diseases of the skin. He regarded the malady as a typical, although special and peculiar, form of round-celled sarcoma, with the occasional occurrence of characteristic spindle cells. Soon after the appearance of Kaposi's paper other observers began to report similar cases, and the list has steadily though slowly grown, until the number of recorded cases is now something over 100. Although the affection is a relatively rare one, most of those who have written about it having seen but a small number of cases, yet one observer, De Amicis,<sup>2</sup> reports having seen more than fifty, by far the largest number observed by any single individual. While the affection seems to be peculiar to no country or race, the great majority of the cases on record have been reported by European observers, and fully one-half of these from the northern provinces of Italy. The number of cases reported in America is extremely small, and some of these oc-

<sup>1</sup> *Archiv f. Dermatologie u. Syphilis*, 1872.

<sup>2</sup> *Monatshefte f. Prakt. Dermatologie*, Bd. xxv.



curred in foreign-born. For this reason, among others, I have thought it might be worth while to add a new and typical case of this very remarkable disease to the list of cases occurring in native-born Americans.

S. M., sixty-nine years old, a traveling salesman by occupation, in excellent general health, came under my observation in January of this year, seeking advice for an affection of the legs which presented the following features: On the dorsum of the left foot and the anterior surface of the leg were numerous round, oval, and irregularly-shaped, slightly elevated, or on a level with the healthy skin, very dark-brown and slate-colored, for the most part smooth, but in places slightly scaly, firm patches. On the calf the disease consisted of many pea- to hazel-nut-sized, confluent firm nodules similar in color to the patches on the anterior surface of the leg, forming a large uneven patch covering the entire calf. Here and there were a few coin-sized, depressed, scaly, less-deeply pigmented areas which, according to the statement of the patient, represented patches of nodules which had undergone partial involution. Over the outer malleolus was a single nut-sized, pedunculated tumor, projecting considerably above the surface, which gave the patient much annoyance because of the pressure exerted on it by the shoe, and the frequent injury which it suffered, owing to its exposed situation, by being caught by the clothing and the bedclothing, considerable hæmorrhage taking place from it at times. Upon the right leg the disease was much less extensive, the lesions being comparatively small in number, smooth, flat, without any tendency to the formation of tumors. The left leg was several inches larger in circumference than the right one, was very firm to the touch, but did not pit on pressure. There was marked itching and some burning, but never positive pain, although walking was somewhat interfered with by the swelling of the left leg and stiffness of the skin about the ankles. The disease had begun fourteen years previously, with intense itching at the root of the toes and smooth pigmentation of the dorsum of the foot, and had remained limited to the left extremity until two years ago, when it began to appear on the right foot and leg. The numerous tumors on the left calf were first noticed some five or six years ago. With the exception of a single thumbnail-sized patch on the inner surface of the left thigh, the disease was strictly limited to the legs and feet.

The treatment employed consisted in the local use of antipruritic lotions for the relief of the severe itching which gave the patient much trouble at times, the internal administration of arsenic in fairly large doses by the mouth, and the use of the X-ray. Up to the present time some fifty X-ray exposures have been made, chiefly to the left leg, at intervals of three to five days, each exposure lasting from



seven to ten minutes. Owing to a severe and prolonged attack of thoracic zoster, which was probably arsenical in origin, the treatment was suspended for four or five weeks, and has been carried out somewhat irregularly since. The large nodular patch on the left calf was the first to be subjected to X-ray treatment, and showed decided improvement after twenty-five exposures, the small tumors becoming less prominent and losing pigment; and a similar improvement has been observed in all the parts subjected to this treatment. The itching which was the chief subjective symptom, almost entirely disappeared so that the patient no longer found it necessary to use the lotion which had been given him for the relief of this most annoying symptom. At an examination made within a day or two, striking improvement was found; not only was there a decided diminution in the size of the tumors and a noticeable decrease in the amount of the pigment, but the swelling of the left leg had diminished to such a degree that it was but very little larger than the right one. It is perhaps worthy of note that, notwithstanding the number of X-ray exposures, there has never been the slightest evidence of dermatitis. May this immunity be due to a protective action exerted by the deep pigmentation of the skin?

Because of its exposed position and consequent frequent injury the tumor over the left external malleolus was excised and subjected to microscopic examination. This examination showed that, apart from a moderate increase in the thickness of the corneous layer, the epidermis was normal. The papillary layer of the corium had entirely disappeared and the corium itself was almost entirely replaced by a cavernous tissue, which under a moderate magnification, resembled an angioma. It was composed of numerous large round and oval cavities, with thin walls filled with blood, with here and there small islets of round or spindle cells between, and in which was an abundance of golden-brown pigment granules. Under a sufficiently high power it could be seen that the blood-filled spaces were lined by endothelial cells, and that the round and spindle cells were contained in a rather coarse fibrous mesh-work. In most instances the spindle cell tracts surrounded capillaries, the long axis of the cells running parallel with the walls of the vessels. The pigment, which was present in great abundance, was situated both within the cells and between them, in the former case frequently obscuring more or less completely the outlines of the cells. The cell-elements of the tumor were in all probability entirely of the spindle-cell variety, the apparently round cells being most likely transverse sections of spindle-shaped cells. In addition to the blood in the cavities already described, there were numerous interstitial hæmorrhages visible in various parts of the tumor.

We are practically without any definite knowledge of the causes, predisposing or direct, of this very remarkable malady. Age seems to have little or no influence upon its occurrence, cases having been observed at all ages between 5 and 80, although the great majority occurred in adult life. Semenow,<sup>3</sup> who saw 10 cases in Stoukownikoff's clinic within the comparatively short period of five years, noted that a large proportion of these had been exposed to more or less severe and prolonged cold, and was inclined to attribute a causative influence to this factor. In one of his cases the bluish nodules occasionally disappeared spontaneously, but always reappeared in damp and cold weather. Micro-organisms have been diligently searched for, but without success. It is true that Pringle<sup>4</sup> has reported the finding of bacilli in two cases, but other investigators have failed to confirm this finding. Bernhardt<sup>5</sup> believes the parasitic theory would best explain its origin, but his bacteriological investigations, like those of others, have been fruitless. This author reports a case in which frequent attacks of erysipelas occurred, but instead of exerting a favorable influence upon the course of the malady, as in some other forms of sarcoma, these were always followed by the appearance of fresh sarcoma nodules in the areas affected by the erysipelas.

The course of the disease is usually quite slow, extending over years, new lesions appearing at longer or shorter intervals and slowly enlarging. Exceptionally, however, lesions may appear very suddenly. Semenow has seen a large blue patch appear in the course of a single night. This sudden appearance of extensive new lesions is due, according to Bernhardt, to the occurrence of abundant, sharply circumscribed hæmorrhages into the skin which simulate sarcomatous nodules. The mucous membranes may be implicated comparatively early in the course of the affection, as evidenced by the appearance of pigmented patches on the buccal and palatal surfaces. Visceral metastases occur late and usually soon bring about a fatal termination. It is of interest and importance to note that the bones of the extremities may be involved in the morbid process. In one of Bernhardt's cases disease of the bones of the foot was demonstrated by the X-ray, and after amputation it was found that the phalanges, with some of the metatarsal and tarsal bones, were almost destroyed, being converted into a spongy mass. Halle like-

<sup>3</sup> *Monatshefte f. Prakt. Dermatologie*, Bd. xxv.

<sup>4</sup> *Comptes Rendus Congrès International de Dermatologie et de Syphiligraphie*, Paris, 1890.

<sup>5</sup> *Archiv f. Dermatologie u. Syphilis*, Bd. lxii.

wise reports a case in which the bones of the great toe, enucleated on account of severe pain were found to be completely destroyed and converted into sarcomatous tissue. Although a fatal termination is to be expected when internal metastases take place, the patient's health is usually astonishingly well preserved until this time, the disease apparently exerting little or no influence upon the general economy so long as internal organs are not invaded. Spontaneous involution of some of the lesions, more or less complete, not infrequently takes place, as in the case I have reported in this paper. The small tumors become less prominent, grow paler, become scaly, and finally sink below the level of the surrounding skin. On the other hand, recurrences may follow extirpation of nodules.

Owing to the striking and peculiar symptoms of the disease, all observers are of one mind as to its clinical characteristics, but there is considerable divergence of opinion as to its histopathology, and more especially as to its place in nosology. While most authors agree with the view of Kaposi that the affection is a form of sarcoma, a not inconsiderable minority regard its sarcomatous nature as more or less doubtful, while a few deny it absolutely. Most of those who have studied its histopathology found the lesions composed of spindle-celled elements, either entirely or in large part; a few found only round or oval cells, while Kaposi and Perrin<sup>6</sup> found both types of cell. Bernhardt maintains that this form of sarcoma is exclusively spindle-celled.

De Amicis, whose experience with this malady has probably been larger than that of any other author, believes it a well-defined type of disease whose nosographic position lies between granuloma and real sarcoma and whose nature is unknown. On account of the severe pains which frequently accompany its early stages, the œdema, the severe itching, the increased activity of the secretory organs, the symmetrical distribution of the lesions, the collection of pigment which he found in the cells of the spinal ganglia, and finally because of some changes in the nerves themselves, Semenow believes that the affection is closely related to the nervous system in its origin. Bernhardt's investigations lead him to the conclusion that it is a sarcoma originating in the perithelium of the blood-vessels—a perithelioma—of unknown cause. Halle looks upon it as a disease of the vessel system and rejects the theory of its microbic origin; he believes it rather due to complicated processes taking place in the

<sup>6</sup> Thèse de Paris, 1886.

<sup>7</sup> *Monatshefte f. Prak. Dermatologie*, Bd. xxxi.



organism itself. Selli<sup>7</sup> considers that recent histological investigations have shown that the affection is not a sarcoma—is not even to be reckoned among the new growths—but is a granuloma, and proposes to call it “*granuloma multiplex hæmorrhagicum*.” The study of my own case, and of the literature of the subject, leads me to agree with the views of those who regard the malady as a sarcoma of special type, and especially with the views of those who consider it a disease of the blood-vessels; certainly these play an important part in its production.

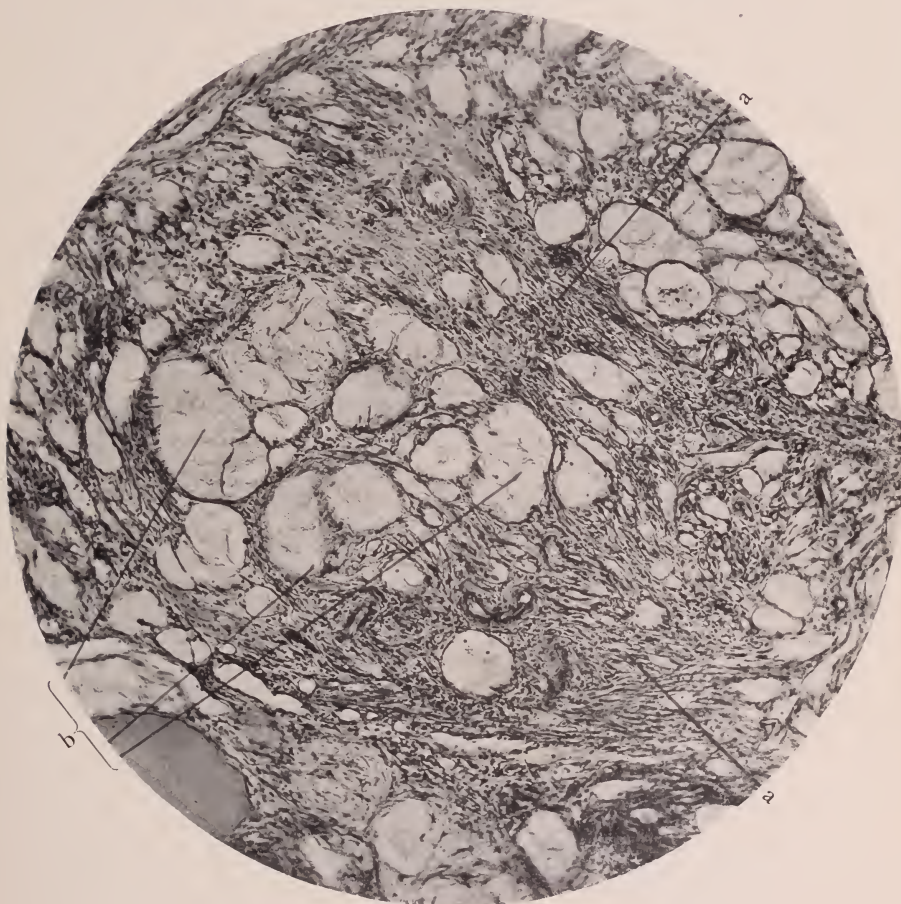
In view of the favorable reports of Köbner,<sup>8</sup> Sherwell,<sup>9</sup> and more recently of De Amicis, the use of arsenic is certainly to be advised in the treatment of this grave disorder. At the Congress at Rome, De Amicis reported 11 cases treated by subcutaneous injections of arsenic; in 5 of these there was no noteworthy benefit; in 2 there was essential improvement, and in 4 the course of the disease was arrested. Later he reported two additional cases; one, a boy 15 years old, in whom a cure was obtained after 100 injections; the other, a man 52 years of age, in whom almost complete recovery took place. On the other hand, Kaposi, Bernhardt, and others report nothing but complete failure in their trials with this drug. The chief difficulty in determining the value of any method of treatment in this affection lies in the fact that spontaneous involution of the lesions may take place, and, in rare cases, even complete recovery, as in the remarkable case reported some years ago by Hardaway.<sup>10</sup> Quite recently the X-ray has been employed with some benefit. Halle reports that, after producing a reaction of the first degree with this agent, there was a decrease in the infiltration and pigmentation; and Selhorst and Polano observed some improvement after the use of the ray. In my own case there was an undoubted diminution in the infiltration of the skin, and a decided lessening of the swelling of the limb, with decrease of pigment after prolonged X-ray treatment.

<sup>8</sup> *Berlin Klin. Wochenschrift*, 1883.

<sup>9</sup> *Jour. Cutaneous Dis.*, 1897.

<sup>10</sup> *Jour. Cutaneous and Genito-Urinary Diseases*, 1890.





Idiopathic Multiple Hæmorrhagic Sarcoma

16 mm. obj. Compens. Oc. 4.

a.—Spindle cell areas.

b.—Cavities containing blood.

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# THE CLINICAL GROUPINGS OF TROPICAL ULCERS OF THE PHILIPPINES, WITH SOME NEGATIVE NOTES AS TO ETIOLOGY AND TREATMENT.

By Surgeon E. R. STITT, U. S. Navy.

Read before the Sixth International Dermatological Congress, New York, September 9-14, 1907.

**D**URING the first few months of my service in the Philippines the question of the nature of the various ulcerations so common among the natives interested me greatly.

The findings of Wright as to the presence of Leishman-Donovan-like bodies and the negative results regarding them obtained by Strong, together with his putting forward of a yeast-like organism as a possible causative factor, made the subject seem one that might offer great opportunities for investigation.

Keeping in mind the type of ulceration described under the various designations of Aleppo Evil, Delhi Sore and Bagdad Boil, I was constantly on the lookout for ulcerations which would clinically correspond with the descriptions of these diseases.

Of the many articles describing these sores the most concise and satisfactory ones are:

I. *As Regards a Division into Stages.*—Where in an article on Aleppo Evil, Cazenave and Schedel quote from M. Guilhou, who in 1835, described the condition in three stages: *First*—of eruption: a lenticular swelling which gradually increased during four or five months without general symptoms; *Second*—of suppuration: in which deep and irregular ulcers were a prominent feature during the succeeding three to five months; *Third*—a stage of dessication: in which dry tenacious scabbing occurred for the remainder of the year.

II. *From a Clinical Standpoint.*—The description of the late Sir Joseph Fayrer (*The Practitioner*, 1875, pp. 264), is a most excellent one. He describes it as an indurated indolent sore at first papular, later encrusted and fungating. The small red papule gradually enlarges during several weeks, then becoming an indurated sore.

He notes that inoculation was only successful by the introduction of the specific cell matter and not the exuding pus.

After observing in the natives a number of chronic ulcerations, especially of the lower extremities, and finding that clinically they did not differ from ulcerations which might be expected from badly infected and neglected wounds, or from the infective granulomata, and that from a standpoint of history there was the single common statement of long duration, I came to the conclusion that the form of tropical ulceration as described in the books did not exist in the Philippines—at any rate in the hospitals.

Subsequently, in Guam, I observed the same thing. Many cases of most extensive and frightful ulcerations of the extremities were noted, in none of which could one eliminate the possible cause of tuberculosis or infected yaws when those due to leprosy were set aside. It was impossible to obtain a history of a papular, comparatively painless swelling, lasting several weeks or months—in other words, there was nothing to connect such cases with oriental sore.

It is interesting to note that the Spanish of the island of Guam divided their quarantinable skin cases into three types:—1. The *gangosas*, when the ulceration was confined to oral and nasal cavities; 2. The *leprosos*, where in addition to face lesions there were the various leprotic lesions of the extremities. and 3. The *llagosos*, which would include those cases principally showing lesions of the lower extremities—possibly tuberculosis—possibly tropical ulcer.

That the confusion existing as to the clinical characteristics of oriental sore was due to mistaking cosmopolitan skin affections for the more geographically circumscribed oriental sore is clearly shown in a contribution by Dr. Gebers in the "*Archiv für Dermatologie und Syphilis*," 1874, where he takes issue with those calling all ulcerations about Aleppo, Aleppo Evil, when he, upon an examination of a series of so-called cases, found the greater proportion to be either syphilitic, tuberculous or eczematous. Anyone reading the classical descriptions on the subject of oriental sore in "Endemic Skin and other Diseases," Tilbury Fox, 1876, must be convinced that the descriptions by various observers certainly refer to a variety of skin lesions.

The confusion as to clinical course and characteristics which had existed in my mind from my earlier observations of these skin lesions was in a measure cleared up by the opportunity of observing several cases among Americans—most of these coming from sailors under treatment in the Naval Hospital, at Canacao, P. I.

These cases were of two distinct types—the one more nearly conforming to the description as given by Fayrer—the latter to



Jeanselme's description of tropical phagedena. As regards the first type: 1. A history of a red spot or lump coming generally on the outer surface of the lower extremities which had gradually enlarged as a painless swelling. While not subjectively painful and only slightly tender to pressure yet complaint was made of a stinging sensation of pain when the swelling was sharply struck. There is considerable itching at times and I am inclined to think that some of the scaling described as preceding ulceration may be secondary to scratching: 2. After slowly enlarging for from four to eight weeks this circumscribed reddened glazed area of skin, giving about the sensation of a solid œdema on palpation, begins to exude from its summit a serum which quickly dries and crusts. Just prior to this it would be mistaken by the average practitioner for a blind boil: 3. Ulceration now proceeds under this encrusted secretion more or less rapidly. There is only a scanty discharge of a serum-like, at times, sanious, secretion which tends to crust over. The ulcers are shallow with irregular, somewhat undermined edges. Later on the ulcers are more or less punched out and may show considerable induration. In some instances I am disposed to think that the induration was the result of frequent cauterization: 4. These remarkably painless chronic ulcers in a person whose health seems unimpaired continue for from three to six months, varying only as a result of the trial of some new form of treatment. In our most characteristic case where there were several of these ulcers the patient enjoyed robust health: 5. After from two or three months to a year these ulcerations show a tendency to heal under the crusts and eventually give rise to a pale, somewhat puckered, cicatrix with pigmented margins.

The shortest period in which the discharge showed itself—that is, in which ulceration set in—was 22 days. It is as a rule much longer.

These ulcerations when curetted failed to show any pyogenic organisms. The smears, as will be seen in the specimens exhibited, show practically an absence of polymorphonuclears, cells of the lymphocyte type predominating. There are many large cells, 20 to 30  $\mu$  in diameter, some of which look as if full of small circular bodies which, however, show no chromatin staining (Giemsa's method).

Now as to the second type of ulceration observed: These sores were observed in persons greatly debilitated. It is interesting to note that in one case the sore was attributed to the eating of mangoes, an idea which was advanced by some of the early Indian writers on this subject.

In the earliest stages these sores seem to resemble an area which has been excoriated and inoculated with vaccine virus, there being a rather dry, angry-looking spot of erythema. This within a few hours may be surrounded by a circle of vesicles beyond which is an encircling inflammatory areola. There is marked subjective pain with tenderness. The serum from the vesicles fails to show any bacteria and the cellular contents are made up almost entirely of polymorphonuclear leucocytes. Within a few hours to one or two days the area within the ring of vesicles is converted into a dark grey to black pultaceous diphtheroid membrane which when detached shows underlying fungating granulations covered with greenish yellow pus. This membrane, if stripped off tends to reform with great rapidity (24 to 48 hours), and in many respects resembles the membrane of diphtheria, except for its dark color.

These ulcerations extend with great rapidity and even when showing a tendency to heal may suddenly, from a point along the margin, proceed to form a new area of ulceration, extending somewhat as would a ringworm. When the original site of ulceration fails to heal during a period of several weeks, the edges become rather indurated but do not show the punched-out or undermined characteristics of the first type.

These cases last for months and are far more tantalizing than the former type of ulceration for the reason that from time to time they show a strong tendency to heal, the process clearing up almost entirely, when suddenly the former area of the ulceration is equalled or exceeded.

In the former type of ulceration there is rarely any tendency to healing so that a favorable prognosis is not given.

Smears made from the surface of the granulations underneath the diphtheroid membrane, a specimen of which is exhibited, show a profusion of polymorphonuclears with an abundance of a branching, irregularly staining organism which somewhat resembled diphtheria, but was larger and did not show parallelism or involution characteristics. There was a total absence of any cocci or other bacteria.

The organisms described by LeDantec as occurring in cases of tropical phagedena apparently were similar but of larger size. James, in referring to Naga sores, states that he found polymorphonuclears in great numbers, but does not record the finding of any bacillus. It will be remembered that he found a striking absence of polymorphonuclears in the Delhi sores examined by him and in

which he found parasites corresponding to the *Helcosoma tropicum* of Wright or the Leishman-Donovan bodies.

Strong refers to a third type of tropical ulcers in which there were various clinical manifestations but in which there were found staphylococci. Such cases were frequently observed at Canacao and presented all types clinically from simple vesicles to pemphigoid lesions and from impetigo-like pustules to extensive erysipelatoid areas going on to necrotic processes and spreading ulcerations. In one case the abdominal muscles were involved. All of these cases showed in smears an abundance of a diplococcic organism which upon culture gave all the characteristics of the staphylococcus *pyogenes aureus*. Although culturally the same organism yet in its clinical manifestations of virulence and variations as to phagocytosis observed in stained films it would appear to be an organism of wide range of pathogenicity.

Wherry and Clegg described such an organism under the name of *Diplococcus pemphigi contagiosi*.

Woolley (J. A. M. A., March 2, 1907), considers that Dhobie's itch is an important factor in tropical ulcer.

After a study of a large number of such cases in which at times I found various moulds of different types in profusion, and again, after repeated examinations, nothing whatever to account for the extensive erythema, I am very skeptical of the existence of any specific organism for this exceedingly common affection. In several of our cases of tropical ulcer there was no history of Dhobie's itch and the large number of cases of the latter affection did not furnish but a very occasional case of tropical ulcer, so that I am sure the coexistence of the two diseases could only be of the nature of a coincidence.

There is one point about fulminating cases of Dhobie's itch, however, which I have noticed and which I have never seen brought out, and that is that in such cases a symbiosis seems to exist between an infecting mould and coccus. In the midst of a mass of mycelium in a smear one would observe areas studded with staphylococci. These cases showed a virulence far surpassing those cases in which only a mycelium and its spores were demonstrated. Whether the symbiosis increased the virulence or whether the cocci facilitated the extension of the mould I am unable to conjecture.

The foregoing clearly brings out the negative character of the etiological consideration of tropical ulcer as observed by me in the Philippines. As regards therapeutical considerations, I feel con-

strained to follow the views of Osler as to whooping cough—in other words, I should sum up the treatment of tropical ulcer as four months of development, four months of ulceration and four months of cicatrization. The French do well to call it the *bouton d'un an*.

It is needless to state that we tried every ordinary treatment that had ever been suggested. Among the special treatments which were tried and which at times appeared to give favorable results, but which again were without effect, may be mentioned:

1. Pepsin and hydrochloric acid locally (artificial gastric juice).
2. Ice bags.
3. Excision of the entire lesion. (In every instance in which this was practised additional lesions made their appearance).
4. Thorough cauterization with pure carbolic acid and after one or two minutes neutralization with alcohol. (On the whole this gave the most favorable results).
5. Bier's passive congestion method. (This was very painful and did not benefit in the least).
6. Massive doses of potassium iodide combined with rest. (Apparently of benefit in some cases).

I have to thank Assistant Surgeon H. W. Smith, U. S. Navy, for the use of the notes of some of his cases and for valuable suggestions in the preparation of this paper.



## OBSERVATIONS ON SKIN DISEASES IN THE NEGRO.

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Read before the Sixth International Dermatological Congress, New York, September 9-14, 1907.

*(Concluded from page 79.)*

It is with a proper realization of its magnitude that I approach the subject of syphilis in the negro. It may be well at the start to call attention to certain changed conditions between the negro of slavery times and the negro of to-day. I agree with certain writers who claim that from a physical standpoint, the negro slaves were infinitely better off than are their descendants of to-day. Slaves, being valuable property, were treated as such and were well fed, housed and clothed. They were further absolutely kept from dissipation. When freedom came, all was changed. Close crowding in poorly ventilated houses, poor clothing and food, and failure to observe the ordinary laws of hygiene are the causes that have changed them, as McHattan says, from the most healthy race in the country, forty years ago, to the most diseased one to-day. An utter lack of morality (Quillian stating that in a practice of sixteen years he had never examined a negro virgin over fourteen), a strong sexual instinct and lack of cleanliness, seem all that are necessary to have brought about a widespread infection with syphilis.

That syphilis in the negro is not only very prevalent, but more so than in the white, is one point upon which the majority of writers, my correspondents and statistics agree. My table shows two hundred and seventy-nine cases of syphilis in the white and five hundred and ninety-six cases in the black, or twelve and twenty-seven per cent. respectively of the totals for each race. Morison gives sixteen and twenty-three per cent. respectively for both races, and Dyer twenty-six per cent. for blacks. Matas shows a proportion in a thousand cases of twenty-eight whites to fifty-one blacks. I have compiled a second table from the Central Dispensary reports for nine years, including all cases of syphilis which were treated in the clinics for medicine, surgery, children, gynecology, throat and chest, skin, genito-urinary and nervous diseases. In a total of fifteen thousand whites in round numbers, there were six hundred and twenty-one cases of syphilis, while in a total of thirty-two thousand blacks, there

were roughly nineteen hundred cases of syphilis. In other words, while there were two blacks to one white who applied for treatment, there were three blacks to one white suffering from syphilis. To be exact, the blacks suffered 1.46 times as often as the whites. From all these figures I think it can safely be inferred that syphilis if not almost universal as Murrell claims, is at least more prevalent in the negro than in the white race.

The question of the relative severity of syphilis, in the two races, is a much more difficult one than that of relative frequency. That acquired syphilis is not more virulent in the negro, but possibly less so, I am inclined to think from the following reasons. First—that the primary and secondary manifestations do not appear to be more severe. Second—that tertiary manifestations do not seem to be more common. Third—that in the negro the disease seems more amenable to treatment.

It may be stated as a general rule, that negroes do not realize the importance of syphilis and are rarely willing to continue treatment after visible manifestations have disappeared. When they do submit to treatment, the disease responds more readily, I think, than in the white race. In speaking of syphilis, Byers writes, "it is more amenable to treatment than in the white race." According to Powell, "the disease is far more amenable to treatment in the negro than in the white, the cases yield readily and the cures are more permanent and satisfactory." "Twenty-eight years of experience in the practice of medicine in the South," writes Dixon, "have convinced me that the only difference in the two races is that the disease yields more kindly to treatment in the negro race."

A greater tendency to pustulation in secondary syphilis of the negro might be considered proof of its greater virulence in this race. Atkinson in speaking of his cases of pustular syphilis in a paper on early syphilis in the negro, says the "course of the pustular eruptions was uniformly benign," and further, "the presence of pustulations was no evidence of special severity of the disease and generally no unusual refractoriness to treatment was encountered."

In an attempt to see whether some of the severe tertiary lesions of syphilis were more frequent in the negro than in the white, I have tabulated cases from the surgical clinic of the Central Dispensary designated as syphilitic ulcer (most of them situated upon the leg.) It has given for this form of tertiary syphilis a proportion of 154 cases in the black to 100 in the white. A similar table from the throat clinic comprising cases of syphilitic ulceration of the larynx,

pharynx, palate and nasal bones (the majority presumably tertiary) gave a proportion of only 131 blacks to 100 whites. Figures from the clinic for nervous diseases, show a proportion of 366 cases of cerebral syphilis in the black to 100 in the white, and on the other hand only 104 cases of locomotor ataxia in the black to 100 in the white. Hecht has called attention to the fact that although syphilis is extremely prevalent in the negro, locomotor ataxia is rare in this race. As my table of eight clinics showed the proportional frequency for all cases of syphilis to be 146 blacks to 100 whites, it is seen that with the exception of the cerebral syphilis, the tertiary lesions men-

TABLE III.  
SYPHILIS.

Disease	Clinic	WHITES			NEGROES		
		Total Patients Applying	Cases	Percentage	Total Patients Applying	Cases	Percentage
Grand total of all cases of syphilis	Eight different clinics	15672	621	.0396	32537	1895	.0582
Syphilitic ulcer leg	Surgical	4072	70	.0171	6873	182	.0264
Syphilitic ulceration of pharynx, larynx, palate and nasal bones	Throat	2152	82	.038	4700	235	.05
Cerebral syphilis	Nervous	990	15	.015	739	41	.055
Locomotor ataxia	Nervous	990	9	.0090	739	7	.0094
Congenital syphilis	Children	2954	23	.0077	4631	81	.0181

Statistics from Central Dispensary, 1898 to 1906. (Congenital syphilis, 1897 to 1906).

tioned above did not show any unusual frequency in the negro. The writer is fully aware that the figures are small and only deal with a few phases of such a varied disease as tertiary syphilis. They cannot do more than convey a suggestion as to the virulence of this disease.

In expressing an opinion upon the severity of syphilis in the negro, I have had in mind only the acquired form of the disease. That the hereditary form is more virulent and is an important factor

in raising the negro mortality, I think probable. According to Hoffmann, the mortality from premature and stillbirths, is greater in the negro than in the white. Corson writes, "I believe the direct mortality from syphilis in the negro is chiefly to be found in the ante-natal mortality and in that of early babyhood." A table compiled from the children's department of the Central Dispensary, shows in an equal number of patients, two and a third times as many hereditary syphilitic children in the blacks as in the whites.

In answer to the question "Is syphilis more virulent in the negro?" the majority of my correspondents have answered in the negative, and some have added, "less virulent." Certain others, however, whose opinions carry great weight, consider syphilis in the negro to be more virulent.

Surgeon Carter in a comparative study of 231 cases of syphilis in the two races, concludes that the disease pursues a milder course in the negro than in the white. In speaking of the negro, Kinloch says, "I do not think he is affected to the same extent (as the white) by syphilitic poison." Quillian writes, "one thing is certain, the lesions are not as severe in the black as in the white race." Although the figures of Matas give a mortality three times as great for the blacks as for the whites, he concludes that "if the mulattoes could be eliminated from the calculation the results would prove, other conditions being equal, syphilis to be less virulent and less fatal in the pure negro than in the white.

In considering some of the peculiarities of syphilis in the negro, attention is first called to those of the initial lesion. According to Morison, the chancre is attended by a greater amount of induration. Lofton states that it has been his experience to "observe as a rule double chancre (especially when located upon the genitalia or its covering) in the negro subject." Multiple chancre occurred in seventeen out of forty-five cases reported by Atkinson. The latter writer lays stress upon the modification of syphilis in the negro due to the great prevalence of scrofula. This is seen, for instance, in the marked inflammatory action of the glands in relation to chancre.

That general enlargement of the lymphatic glands is more constant and more marked in the negro, no one, I think, will dispute. In Dr. Carter's table enlarged glands were noted in fifty-nine whites and in one hundred and two blacks. Tiffany states, "enlargements of lymphatic glands are apt to be marked in the syphilitic negro compared with the white race." That the pustular syphilide in the negro is somewhat more common than in the white seems probable.



According to Tiffany, "excessive pus formation occurs in the negro not only with scrofulous affections, but with syphilitic as well." Carter states that in the negro, syphilis is marked by few cutaneous lesions, and these mainly pustular. A peculiar appearance has been observed by Taylor in two cases of papular syphilis in the negro. The eruption consisted of large flat papules, "nearly of a snow-white in spots where the skin was kept clean, and of a dirty-white elsewhere." Reference to lesions of the mucous membrane and to the occurrence of pruritus in syphilis will be made later.

If I were asked what I considered from my experience to be the most striking dermatological peculiarity of the negro, I would say without hesitation, the annular syphilide. (See Figs. 3, 4, 5 and 6.) This form of syphilis, it seems to me, should be classed with keloid and elephantiasis as affections that are very common and distinctive in the negro. Comparatively little has been written about the annular syphilide, and still less on its relation to the negro. The subject has been ably discussed by Atkinson in a paper entitled "*Syphiloderma Papulosum Circinatum*." This title well describes the condition to which I have reference, the lesions being simply flat papules that have cleared up in the center and then left elevated rims to form various-sized circles. The eruption as you well know, is one of the early period of syphilis, and is to be sharply differentiated from the circinate grouping of tubercles of late syphilis. I have seen the annular syphilide most often about the nose and mouth, though it may also occur on the trunk and upper extremities. Though I have only seen the eruption in the form of partial or complete circles or festoons, it may assume extremely fantastic designs resembling scroll work, an example of which is shown in the extraordinary photograph kindly given me by Dr. Carmichael. A somewhat similar though less well marked illustration is shown by Jullien in his *Maladies Vénériennes*. Fine illustrations of the annular syphilide are to be seen in the atlases of Wilson, Taylor, Morrow and Pringle, but no reference is made to the disease in the negro. Photographs of the annular syphilide in the negro appear in the text books of Stelwagon and Pusey, and both of these writers state that the disease is more common in the black than in the white. In my statistics obtained from the Johns Hopkins Dispensary, out of a thousand consecutive cases of skin disease in the white, there were seventy-two cases of syphilis, none of them presenting the annular form of the disease. In the corresponding 1000 cases in the negro, there were one hundred and ninety-three cases of syphilis, eleven of which, or .057 per cent., presented examples

of the annular syphiloderm. Finally, it may be remarked that the diagnosis is uniformly easy, though to one unfamiliar with these lesions, the eruption might readily be mistaken for the annular form of erythema multiforme or for ringworm.

Of the benign tumors of dermatological interest, I should like to call your attention to one that is characteristic of the negro, namely, keloid. In an effort to obtain as large figures as possible upon this subject, I have tabulated the cases from the surgical and from the ear departments of the Central Dispensary. These figures added to those of my general table, give a total of three cases of keloid in the white, and the rather surprising number of seventy-six

TABLE IV.  
TUMORS.

Disease	Clinic	WHITES			NEGROES		
		Total Patients Applying	Cases	Percentage	Total Patients Applying	Cases	Percentage
Angioma . . .	Surgical and skin	6272	1	.000159	9073	3	.00033
Carcinoma . .	Surgical and skin	6272	13	.00207	9073	16	.00176
Epithelioma .	Surgical and skin	6272	46	.00733	9073	5	.00055
Fibroma . . .	Surgical and skin	6272	7	.00111	9073	14	.00154
Keloid . . . .	Ear, Surg. and skin	8382	3	.00035	11486	76	.0067
Lipoma . . . .	Surgical and skin	6272	5	.00079	9073	39	.00429
Papilloma . .	Surgical and skin	6272	22	.00350	9073	27	.00298
Sarcoma . . .	Surgical and skin	6272	7	.00111	9073	12	.00132

Statistics from Surgical Clinic of Central Dispensary, 1898 to 1906, plus figures given in Table 2. Statistics for keloid contain in addition cases from Ear Clinic, 1898 to 1906.

cases in the black. In proportion to the total patients of each race treated in these clinics, keloid was eighteen and seven-tenths times more frequent in the negro than in the white. The figures of Matas from a small number of cases show keloid to be nine times as frequent in the negro. Morison's table gives three cases in the pure black and none in the mulattoes or whites. Dyer states that in 2538 cases of skin disease, twenty-one per cent. of which were negroes, he observed five cases of keloid in whites and only three in

blacks. The small number of cases in the negro was explained by Dr. Dyer from the fact that the negro rarely seeks medical assistance unless compelled to do so by unbearable conditions. Balloch calls attention to the fact that in the statistics of the American Dermatological Association for keloid, although no mention is made of color, the majority of cases are reported from cities having a large negro population. The same writer saw nine cases of keloid in one hundred and fifty-two blacks and no cases in three hundred and ninety-two whites. The statistics of James C. White, give fifteen cases of keloid in 10,000 American Dispensary cases, among which were doubtless many negroes. There were five cases of keloid in 10,000 Scotch patients, and none in 3000 Irish patients, all of which were presumably white. In 23,944 cases from the Vienna Clinic, one case only of keloid was reported. That the lobule of the ear is a very favorite site for keloid is seen from my figures which record for this situation twenty-four cases, eighteen of which were females. Scheppegegrell, in 11,855 cases of diseases of the nose, throat and ear, found eight cases of keloid of the lobule, seven of which were negroes, one a mulattress and one a white person.

From all of these figures it can readily be seen why keloid is so often classed as one of the three common and distinctive diseases of the negro, the others, as you know, being elephantiasis and uterine fibroid. According to Balloch, fibroid processes as represented by these three affections are so much more common in the negro that they constitute a racial peculiarity.

In connection with keloid I should like to remind you of the frequency in the negro of an allied affection, the so-called keloid acne or dermatitis papillaris capillitii of Kaposi. That this disease is very common in the negro as compared with the white, is seen from my figures giving ten cases for the former and only one for the latter. A number of illustrations of this peculiar condition are to be seen in my exhibition of photographs. (Figs. 1, 7, and 10.)

A glance at my table of tumors, which is unfortunately of very meager proportions, shows papilloma to be about equally frequent in the two races. Angioma is twice as frequent, and lipoma nearly five and one-half times as frequent in the negro as in the white. Of the malignant growths, sarcoma is slightly more common and carcinoma slightly less common in the negro than in the white.

It is not my intention in this paper to discuss the general subject of cancer in the negro. I wish merely to call attention to that form of malignant growth of such importance to the dermatologist,



namely, cutaneous epithelioma. In this affection we appear to have another example of the lessened susceptibility to skin diseases that is enjoyed by the negro. Epithelioma in my table appears thirteen and three-tenths times as often in the white as in the black. In Tiffany's statistics there is not a single case of epithelioma of the face or lip of a negro. Yandell stated that he had never seen an epithelioma on the face of a negro. Christopher Johnston said that he had only infrequently met with epithelioma in the negro race, and nearly all with whom I have corresponded have had a similar experience.

Some very interesting figures and conclusions are given by Hyde upon this subject in a recent contribution on the "Influence of Light in the Production of Cancer of the Skin." The figures which relate to deaths from cancer of the head, neck and face (practically that of the skin) are taken from the last census reports of two Southern States of about equal population. The returns lack only ten of reporting twice as many fatal cases of cancer in the northern as in the southern states. This appears significant when it is considered that half the population of the southern states consisted of negroes. The writer concludes that the physiological pigmentation of the skin in the colored race seems to furnish immunity against cancerosis of that organ. Finally, although firmly convinced that epithelioma in the full-blooded negro is decidedly uncommon, I must in fairness mention the fact that the statistics of Richardson actually show a greater frequency of epithelioma in blacks than in whites.

I have long been under the impression that itching was a more or less characteristic feature of skin affections in the negro. This would appear to be borne out by my statistics giving about twice as many cases of pruritus of different forms in the blacks as in the whites; while the figures of Morison record twenty-four cases of pruritus in pure blacks and five in whites. Since my attention has been specially directed to this subject, I have concluded that while negroes may complain of itching more often than whites, the visible results of scratching are certainly much more marked in the latter race. It is probable that the papular syphilide, though giving rise at times to pruritus in the white, is more likely to do so in the negro race.

Of the pigmentary diseases vitiligo appears in my table more frequent among the blacks, the proportion being six blacks to four whites. (Figs. 11 and 12.) Morison's figures show four cases in the black to one in the white. On the other hand, chloasma appears



in my table to be twice as common in the white as in the black. That these figures do not represent the actual conditions, I feel perfectly confident. It is natural that a negro with such a striking affection as vitiligo would be more apt to seek medical aid than a white person with the same disease, whereas the conditions would be exactly reversed in the case of chloasma. Atkinson considered that vitiligo was only apparently more common in the negro, not actually so. Chloasma in the pure black would often pass unnoticed. In the mulatto, however, it is noticeable and of more frequent occurrence than in the whites, in my opinion. Rutz stated that chloasma was remarkable for its frequency and extent in mulatto women. Atkinson also considered chloasma to be especially common in those of mixed descent. Whether pigmentation following inflammatory and other lesions is more common in the pure black than in the white, it is difficult to judge for obvious reasons. That it is more common in the mulatto than in the white, I feel convinced.

A comparison of the parasitic diseases in my table shows 243 cases of scabies in the white and 170 in the black. There were fifteen cases of pediculosis corporis in the white and twenty in the negro, a rather small number for the latter, considering his uncleanly habits. The figures for pediculosis capitis show a rather striking disproportion, namely, 54 cases in the white and only 5 in the black. This might indicate that the negro scalp is less irritated by the presence of pediculi and that he in consequence does not seek the clinic as often as the white. It may, however, indicate that the negro takes greater pains in the care of the scalp than the lower class of whites that attend our clinics. Dr. Carmichael informs me that the negro women in Virginia take a special pride in keeping their heads and those of their children free from lice. Dr. Pendergast of Memphis, suggests that negro women unconsciously and of necessity employ one of the methods of treating pediculosis, namely, the fine tooth comb. In contrast to the figures for pediculosis are those of tinea capitis which show seventeen cases in the white and fifty-six in the black. A similar proportion is given in Morison's statistics with fourteen whites and forty-two blacks. Both favus and chromophytosis appear in my table slightly more common in the negro than in the white.

My figures for seborrhœa show eighteen cases in the white and twenty-three in the black. On the other hand there are twelve cases of alopecia in the white and only one in the black, representing in my opinion the relative proportion of baldness in the two races.

*Alopecia areata* appears ten times in both races, a rather high proportion for the blacks, it appears to me. It is well known that canities makes its appearance considerably later in the negro than in the white, marked grayness being a sure sign of advanced age in the former race.

It may not be out of place in this paper to show some evidence that the mucous membrane of the negro shares with the skin a lessened susceptibility to disease. According to T. E. Murrell, "in the adult negro nasal and pharyngeal diseases are quite infrequent." Scheppegrell states, "in the diseases of the nose we find a proportionately small number of negroes affected." The same writer gives some figures showing the proportion of diseases of the mouth and tongue to be forty-two blacks to one hundred whites. Carter states that the mucous membranes of the negroes are less vulnerable to syphilis than those of the white. In his table of syphilitic lesions of the mouth and fauces, there were thirty-nine cases of hyperæmia of the fauces in the white and only six in the negro, though the writer admits that this condition is probably more common than is here indicated. There were, however, thirty-one cases of mucous patch in the white and none in the black, a disproportion that is indeed striking. My attention has lately been called to the rarity of leukoplakia in the negro, while studying a case of leukoplakia buccalis which I have been fortunate enough to have under my charge. (See Figs. 8 and 9.) I have again called upon my correspondents for aid and addressed the question: Have you seen many cases of leukoplakia in the negro? As in the case of psoriasis, the question should have read: Have you ever seen a single case? Most of my colleagues answered simply "No." Four stated that they had seen several cases. Dr. Carmichael had seen "one case in a full-blooded negro," while such good observers as Drs. Dyer, Engman, Grindon and Mastin stated that they had never seen a case of leukoplakia in the negro. I have been unable to find any reference in text books on dermatology or syphilis to this peculiar immunity enjoyed by the negro.

That the negro may suffer as well as the white man from some of the rarer diseases of the skin, is seen from my list of affections in which one case of each disease was recorded. Included in this list are blastomycosis, herpes iris, lichen ruber, lichen scrofulorum, morphœa, mycosis fungoides, Paget's disease, pemphigus and Henoch's purpura. The case of blastomycosis was one of the two negroes that have been reported by Dr. Gilchrist. The only case of blastomycosis which it has been my fortune to treat is that of a

mulatto with a lesion upon the buttock, an illustration of which also appears in my collection. One case of ainhum is recorded in my statistics which, like nearly all of the cases of this peculiar disease, was noted in a negro. My figures, strange to say, do not include a single case of elephantiasis.

A consideration of the exanthemata opens up such a large field for discussion that I have felt it advisable to omit any reference to this subject, and devote my time to those more strictly dermatological.

Finally, I should like to express a single opinion upon the relative susceptibility of the negro and the mulatto to skin diseases. I feel convinced that in general the mulatto is more susceptible to diseases of the skin than the full-blooded negro, this being especially true of acute inflammatory diseases, chloasma and cutaneous tuberculosis.

#### CONCLUSIONS

1—In spite of the fact that the negro is more susceptible to disease in general than the white man, and that his mortality is twice as great, he suffers less frequently and less severely from diseases of the skin.

2—The negro skin is decidedly less susceptible to external irritants.

3—The full-blooded negro is almost immune to ivy poisoning.

4—Acne is less common and much less severe in the negro. Rosacea is a rare and very mild affection. Eczema is perhaps not less frequent though certainly less severe. Psoriasis in the full-blooded negro is very uncommon.

5—Tuberculosis of the skin is not more common in the negro in spite of the great prevalence in this race of pulmonary and other forms of tuberculosis.

6—Syphilis is certainly more common in the negro than in the white. It is probably not more virulent. Tertiary forms are not more common. A tendency to the annular syphilide as well as to keloid, elephantiasis and fibroma, deserves to be classed as a racial peculiarity of the negro.

7—The negro is more subject to new growths of connective tissue origin and less so to those originating in epithelial structures. Cutaneous epithelioma is very rare in the full-blooded negro.

8—The mucous membranes as well as the skin are less susceptible to disease. Leukoplakia is seen in the negro with extreme rarity.

9—Many of the rarer forms of skin disease are observed in the negro as well as in the white race.

10—Mulattoes are more susceptible to skin diseases than negroes, being especially prone to chloasma.

In closing, I desire to express my thanks to Drs. Gilchrist and Carmichael for their kindness in putting the statistics of their clinics at my disposal. I am also indebted to Dr. Grindon for a long letter containing many valuable suggestions. Finally, I must express my deep gratitude for the assistance so kindly rendered by my numerous correspondents scattered throughout the South.

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## SOME EXPERIMENTAL OBSERVATIONS ON THE HISTO-PATHOLOGY OF URTICARIA FACTITIA.

BY T. CASPAR GILCHRIST, Baltimore, Md.

Read before the Sixth International Dermatological Congress, New York, September 9-14, 1907.

THE author exhibited about sixty lantern slides demonstrating the histo-pathology of wheals which were produced artificially by drawing down the finger nail or a blunt instrument rather sharply over the skin of patients suffering from urticaria factitia, no other disease being present. Fifteen cases were examined but the lantern slides represented micro-photographs of sections taken from only seven of the most pronounced cases of this disease. Usually the lesion was excised fifteen minutes after the wheal was produced, but in one case portions of wheals were excised after two minutes, five minutes, eight minutes, fifteen minutes, twenty-five minutes, forty minutes and sixty minutes. In the section excised after three minutes there was present fragmentation of nuclei which seemed to show death of cells preceding the inflammatory changes which followed. Sections of the wheals from severe cases showed marked œdema, of the connective tissue and the fixed cells, profuse emigration of polynuclear leucocytes, emigration of lymphocytes, pronounced fragmentation of polynuclear leucocytes and fixed connective tissue cells, apparent increase in mast cells, swelling of the cells of the sweat glands, and fibrin scattered throughout the corium. In the sections excised one hour after, many polynuclear leucocytes were still present but very little fragmentation was noticed. Portions of normal skin were excised under similar conditions so that proper comparisons could be made.

In one very severe case the polynuclear leucocytes were nearly all fragmented almost directly after leaving the blood vessels. In all the cases the wheals usually disappeared clinically within an hour. The pathological picture is undoubtedly one of typical acute inflammation (Cohnheim) and the fragmentation of nuclei is as remarkable as that produced by diphtheria toxin (observation by Dr. William Welch, after carefully going over the specimens).

The only explanation which appears to be possible is that some toxin is circulating in the blood and when a wheal is produced some of the toxin is set free and produces death of cells which is followed by acute inflammatory changes. Therefore a true wheal is an acute inflammatory œdematous swelling due either to local inoculation of irritating substances, as in insect bites, etc., or to drugs or to some toxin probably originating in the alimentary canal.

The author's observations have extended over the last thirteen years and references to his earlier experiments are to be found in Duhring's text book on cutaneous medicine, Vol. I, p. 129 (1895); also Vol. II, p. 293, and in the Johns Hopkins Bulletin, Vol. VII, No. 64, p. 141 (1896).

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## THE EFFECTS OF ROENTGEN RAYS ON PAGET'S DISEASE OF THE BREAST

By DR. ROBERTO TERZAGHI and PROFESSOR CAMPANA.

Read before the Sixth International Dermatological Congress, New York, September 9-14, 1907.

SOME forms of apparent psoriatic eczema on the breast often do not receive medical attention, and may at times assume a chronic and malignant form, as of epithelial tumor, a form that has been named from the author first describing it, "Paget's Disease." It is not about the nature of this affection that we wish to speak, but simply of the results obtained with Roentgen rays in cases that threatened to assume the above named form of disease.

We will quote, in this connection, an experiment with the relative results obtained by means of a certain number of applications of Roentgen rays in two cases.

### CLINICAL HISTORY

Diagnosis—Eczema psoriasiform of the breast (incipient Paget's disease). Nutrition good, skeleton development regular, stature above the mean, skin somewhat pallid. On the skin of the chest, the nipples, mammary areolæ and adjacent parts showed a slightly humid maculo-squamous eruption, the scales were broad and coriaceous, indifferently adherent, and humid on the lower side, the underlying skin thickened, somewhat hardened, little movable in its

different layers and little developed on the subcutaneous nipple. Microscopic examination of the scales showed no pathogenic mycotic forms; there were the usual corpuscles described in psoriasis. On the rest of the body a few lentiform papules at very great intervals on the back and on the thighs. Slight itching sensation. Genital organs normal. No pathological product in the urine. Different functions normal.

The patient began to suffer in the breasts about three years previously and had experienced no improvement from various methods of treatment undergone at her home.

From the first application of the rays, we began to notice a modification in the resistance of the epithelial cutaneous cells especially in the periphery of the mammary areola, first on one side, then on the other, and afterwards on the rest of the periphery of the nipple, which was the part most affected: more persistent adhesion of the epithelium, diminution of the dermic swelling; not remarkable, yet evident, return to their normal state of the lines and folds of the skin of the nipple; gradual diminution of the humid condition where the corneous stratum was still wanting.

The experiment of the application of the same methods was repeated on another case, and with the same favorable results.

These two experiments do not seem to me without interest, when we reflect on the extremely malignant course the process assumes in sequence to phases similar to the cases related by us.



## SOCIETY TRANSACTIONS.

### THE NEW YORK DERMATOLOGICAL SOCIETY.

353d Regular Meeting, December 17, 1907.

DR. E. B. BRONSON, President, in the Chair.

#### A Case of Ichthyosis Hystrix. Presented by DR. WINFIELD.

The patient, a girl aged eleven, native of the United States, German parents; at birth the skin was scaly, more marked over the lower part of the abdomen and legs and arms. The other children of the family are healthy; there is no history of fright or any other untoward condition of the mother during this pregnancy.

Present condition: The child is an undersized girl with blunted intellect. The ichthyotic condition is more marked over the arms, neck, scalp, lower part of the abdomen, thighs, and legs. The face is slightly scaly; the skin of the palms and soles appears normal; if the skin is not constantly oiled it becomes eczematous; at times the ichthyotic scales desquamate, leaving the skin almost normal in appearance.

DR. SHERWELL agreed that it was ichthyosis hystrix, but that the inspissated seborrheal element was in excess of the epithelial. He remembered the case as having been under his care some years ago. It had cleared up at that time with a moderately strong ointment of hydrarg. ammoniat. and salicylic acid.

DR. JOHNSTON said that a possible element in the etiology of ichthyosis is diminished thyroid secretion. It would do no harm to try its administration and it might do a great deal of good. Recently he had had a clinic patient, a woman who was not only ichthyotic herself but had borne two harlequin foetuses, both of which died a short time after birth. One of these was autopsied, and there was almost complete absence of the thyroid. The woman herself had the habit of clearing up to a considerable extent during pregnancy, but returned promptly to her previous state when the pregnancy was over. She had five children in all, three of whom were normal.

DR. FOX was pleased to see so well marked a case of ichthyosis hystrix. A number of cases have been reported in dermatological literature which have been simply naevus linearis, not ichthyosis at all. This is an undoubted case.

DR. WINFIELD said that the patient had been under the care of several physicians for a number of years, and he inferred that thyroid treatment had been used. He had observed two cases of ichthyosis congenita spoken of by DR. JOHNSON; one had been autopsied and no thyroid was found; he had used thyroid extract in cases of simple ichthyosis, but with no effect.

The child shown to-night is undoubtedly stupid, and appears as if she had adenoids, although they had not been looked for. Instead of the thyroid being absent it appeared to be hypertrophied. It was his intention to examine for, and remove the adenoids, if found, and put the patient upon powdered thyroid.

DR. FORDYCE also thought it might be of interest to try thyroid treatment.

He did not think, however, that it would have any more effect in this case than it would in any other congenital nævoid condition.

DR. SHERWELL also had seen the case of ichthyosis congenita (harlequin fœtus), referred to. The child lived and had a hard thickened skin that looked like the hide of a rhinoceros. It lived under linseed oil treatment for five months. It lived an unusually long time, he believed the longest on record. He had written up and published the case.

#### A Case for Diagnosis. Presented by DR. SHERWELL.

Jennie E., aged fourteen, first came to the clinic with frank psoriasis of the head, on October 14, 1907. She was treated with ammoniated mercury, resorcin gr.x. and salicylic acid grs.v., acid chrysophan iii., to vaseline oz. i., with rapid and good results—entire cure. A month or more later the present eruption appeared, and has not yet yielded to treatment. This peculiar gyrate form of trouble on body came on about a month later. It now resembles a case of dermatitis seborrhoica with unusual formation of impetiginous bullæ, here and there, he thinks the application of the same ointment as used on head may account for this as the skin seems unusually sensitive.

Dr. Fox did not think it psoriasis, but a form of circinate impetigo. He had seen a number of cases of limited extent resembling this. He was not sure that they were of precisely the same nature as the common contagious impetigo, but was closely related to it.

Dr. DADÉ said that from a distance the picture presented did resemble psoriasis, but on closer inspection the borders could be distinctly made out to be vesicular, such as are seen in acute ringworm, derived from animals. He strongly suspected ringworm of this nature and would like to examine this microscopically—the rings and festoons being confined to the body—though lesions having been in the head, the hands—face, arms, and legs remaining free, with absence of any of the crusts that are so typical of impetigo, would hardly hold for this diagnosis. Psoriasis it was not.

Dr. FORDYCE would not make a diagnosis without further observation and investigation. In his opinion, however, the case was one of serpiginous impetigo contagiosa. In some of these cases it was not easy to make a differential diagnosis from some forms of tinea circinata. The primary lesion in this instance, however, seemed to be a bulla which soon became crusted.

DRS. JACKSON and WHITEHOUSE agreed with Dr. FORDYCE. Another member thought it was impetigo contagiosa.

Dr. SHERWELL said that he had not presented the case as psoriasis, but as a lesion which commenced in the scalp and appeared like a psoriasis. It was cured, and a month or more later some other lesions appeared. It is a question whether the ointment used, although mild in character, had not produced a dermatitis. The ointment has been stopped and the patient put upon inunctions of sweet almond oil, and she has improved under the latter treatment. She seems to be a strumous child and one whose skin is easily affected. Dr. SHERWELL said that he himself had made no diagnosis. It seems to be a form of impetigo. He had only seen the child once or twice within last few days.

**Pemphigus Vegetans. (?) Presented by DR. JOHNSON.**

The patient is a woman past forty years of age. The lesions occupy the usual sites of this type of bullous eruption, axillæ, groins, etc. When she first came to the clinic there were no evidences of bullæ. The areas involved showed these elevated patches covered with serous crusts bordering wide areas of pigmentation. There were so many features in the eruption which suggested syphilis, that a week ago she was put upon specific treatment, with the result that her already disturbed digestion was completely upset, and she has now an outbreak of blebs and vesicles in the same regions, occasionally grouped and itching excessively. Observation reveals an evident element of vegetation, either dermatitis vegetans, or possibly a beginning pemphigus vegetans. She has had this eruption now for about four months altogether. In spite of gastro-intestinal disturbance which is very marked, the urine was normal; the blood count showed nothing before the present relapse. Experience with pemphigus vegetans is of course very limited, but with the tendency in the skin to vegetation, the localization, and the pronounced depression that seems the probable ultimate diagnosis.

DR. FOX said that the localization of the eruption is similar to many cases seen in children, with large bullæ at the margin of the patches. This runs an acute course, with frequent relapses and is generally termed pemphigus.

DR. WINFIELD did not think it pemphigus vegetans on account of the appearance of the lesion and the itching.

The localization near the groins might suggest that diagnosis, but in his experience pemphigus vegetans started differently; the mucous membrane of the mouth, or the skin about the finger nails were first involved. Several years ago he had a patient, a man, who after vaccination had an eruption of bullæ in the groin and axillæ; the appearance was much the same as in the case shown to-night; the lesions involved the groins, scrotum, and axillæ; early in the course of the disease there had been some vegetations; finally the eruption spread all over the body, assuming the character of true dermatitis herpetiformis; the man still has occasional outbreaks, although they are much less severe in character; he has had no symptoms of pemphigus in all this time.

DR. FORDYCE would make a diagnosis of dermatitis herpetiformis with secondary dermatitis vegetans. He had observed two such cases over a period of several years and had not seen them develop pemphigus vegetans. The location of the lesions in the axillæ and inguinal regions recalled the case which he had reported in connection with DR. GOTTHEIL, under the name of dermatitis vegetans, and was also analogous to the cases described by HALLOPEAU and others as pyodermites végétantes.

DR. JACKSON said that the lesions suggested dermatitis herpetiformis rather than pemphigus. He would not make the latter diagnosis until there were other evidences of it.

DR. WHITEHOUSE considered it to be dermatitis herpetiformis, on account of the lesions, and their being associated with intense itching. He would hesitate very much about calling it a pemphigus. He regards it as a case of dermatitis herpetiformis with vegetations due to secondary infection.

DR. SHERWELL considered it dermatitis herpetiformis of unusual type. The



mouth lesions are absent, and the mucous membrane of the boundary line at the vagina not being involved, he thought the diagnosis of pemphigus vegetans was improper, he would prefer to wait two years before making any diagnosis.

DR. JOHNSTON said that he was perfectly willing to stand corrected in the matter of the diagnosis; the first idea that came into his head on seeing the case was that it was a dermatitis herpetiformis, but he also made a tentative diagnosis of pemphigus vegetans at the same time. The case did not occur in the characteristic localization of dermatitis herpetiformis. Not only that, but the very marked depression that went with the acute outburst was impressive.

DR. LUSTGARTEN said that he had not thought of it at first, but the condition began about the menopause. He had never seen such a condition due to the menopause, but we do see a number of erythematous eruptions, and tentatively it might be well to give the patient ovarian extract and see whether it would make any impression on the condition.

In reply to an inquiry from DR. JOHNSTON as to whether he had ever obtained any good results from such treatment, DR. LUSTGARTEN replied that they had obtained some very excellent results.

### **Erythema Multiforme (Perstans).** Presented by DR. SHERWELL.

Margaret McC., aged fourteen. First seen at the clinic in the fall of 1904. The lesion appears mostly on the hands and face, and reappears in colder weather and changes of season, fading in the summer. She comes from a malarial region and seems to have a tendency to rheumatism. Three years ago it seemed to be a characteristic erythema multiforme on backs of hands, etc.

He saw the patient a fortnight ago, after an absence of two years, and did not remember it at first. When he first saw the case some years ago he had put it down as erythema multiforme. The same thing continues now, and it fades in the same way. It comes out in the colder weather. The patient lives in an exposed place, near Greenwood. The parents are healthy, and the child also seems healthy.

DR. JACKSON said that it seemed to him the lesion on the face would ultimately become a lupus erythematosus. The occurrence of the parasitic lesions on the extensor surfaces of the forearms suggested a chronic urticaria. It seemed likely that the condition on the face and that on the arms were quite distinct. It certainly was unusual to see in an erythema such marked pruritus of the arms as in this case.

### **An Unusual Case of Lupus Erythematosus with Cutaneous Infiltrations Resembling Circumscribed Scleroderma.**

Presented by DR. WHITEHOUSE.

Mrs. F. T., aged thirty-nine; married and has three children—twenty, eighteen, and fifteen years of age. The two eldest are perfectly well; the youngest was well up to two years of age, when she had cerebrospinal meningitis, since which time she has been an imbecile. Six years ago patient had a miscarriage at the fourth month, resulting from a severe fall. No history of tuberculosis.



Her skin affection began seven years ago, as a firm, circumscribed, painless induration in the skin over the right malar protuberance, the skin covering it being unaffected. The patient states that the original "lump," which was flat and about one by three-quarters inches in size, by very slow degrees "moved" across the face to the nose, where it now spreads over both sides of the nose in the form of an indurated symmetrical swelling, fading gradually into the surrounding tissues; the skin over it no win this location is devoid of scales, is bluish-red in color, and suggests a patch of morphœa. Over the left malar protuberance is another infiltrated patch, the skin covering it being the seat of a typical circular patch of lupus erythematosus about one-half an inch in diameter, with adherent scales, from the lower surface of which are tiny projections corresponding to the follicular openings. There is a similar patch of lupus erythematosus on the left temple, some smaller ones on the right cheeks, and a symmetrical band of baldness about two inches wide extending from each temple over the ears and meeting in the median line in back. The skin is perfectly smooth, shining, bluish-red in color, and apparently atrophied; near the posterior junction of the two bands, on the left side, is a recent circumscribed swelling, which the patient states illustrates the method of the progression of the disease. At this point there is more redness and a sensation of smarting, but when quiescent there are no subjective symptoms whatever in any of the lesions or areas involved.

Scattered over both sides of the lower jaw, both sides and front of the neck, and on the chin, are a dozen or more of these indurated plaques, apparently imbedded in the thickness of the skin, which is not movable over them, but otherwise appears normal. These vary in size from one-half to one inch in diameter; there is one subcutaneous nodule in the left sub-maxillary region; the lobe of the right ear is the seat of one of these infiltrations, the left ear being free. The skin covering the right zygomatic process feels slightly hidebound, as does also the skin over the chin.

The disease has changed the facies of the patient very materially. Both cheeks are deeply sunken beneath each malar protuberance, so that they are almost funnel-shaped, and the symmetry of the face is impaired by these cutaneous infiltrations. The skin of the cheeks is unnaturally loose and falls in small folds where it is not the seat of the disease. The face was formerly round and smooth, but there now seems to be a considerable loss of sub-cutaneous fat and muscle substance.

She has not lost flesh generally, has a good appetite, but complains of constipation. The menses are regular and normal. Since this disease began, however, she has had periodical attacks of very severe headache in the temples, lasting three days. Last winter and this she has also suffered from very cold hands and feet, with tingling and numbing of the fingers, and intense pain in the fingers often lasting an hour after being exposed only to a mild cold. She does not have the so-called "dead fingers," but states that the nails become dead white.

DR. SHERWELL said that he had been struck by the appearance of the face, which was very analogous to a case which he had presented before the Society some twenty years since. He had lost sight of the patient for fifteen years, and she is possibly now dead. It was then presented as a case of *double hemi-atrophy*, which of course was a contradiction of terms. The sinking in of the face was more marked than in this instance, but the history was very similar. The mummification and the hardening of all the tissue beneath the skin was very marked, the face looked like a death's head. There was first an hypertrophy and then a distinct atrophy of all the parts as in scleroderma ordinary. He promised to bring a picture of the case to the next meeting. The whole thing seemed to be a scleroderma, which involved the muscular tissue as well as the skin and subcutaneous tissue. She was plump of body and otherwise apparently healthy, and bore healthy children afterward, and seemed to get along very well.

DR. WINFIELD said that he had seen the case referred to by DR. SHERWELL, and there was a great similarity in the history of the two cases.

DR. WHITEHOUSE said that he had nothing to add to the history. In daylight the circumscribed lesions on the face and temple showed every clinical evidence of lupus erythematosus; the other condition is apparently a circumscribed scleroderma. The patient states that the atrophy of the tissues of the cheeks was coincident with the original thickened patch below the eye, but it evidently followed it.

DR. FORDYCE said that last year he had presented a patient with sclerodactylitis and scleroderma of the face. She also had alopecia and red atrophic patches in the scalp which could not be distinguished from lupus erythematosus. The clinical picture was somewhat similar to this one excepting that his patient did not have the atrophy of the deeper structures.

### Erythematous Eczema. Presented by DR. SHERWELL.

Mr. C., aged fifty-two. The present trouble commenced about the 20th of November and seemed to be of an erysipeloid nature. It was diagnosed as erythematous eczema, and when he first appeared at the office for treatment he was put upon a lotion of oxide of zinc and lime, camphor water and a little adrenalin solution. This was followed by a slight improvement. The condition seems to be an erythematous eczema with other adnexa, and he has been presented for a more accurate diagnosis, and suggestions for treatment.

The lesion appears only on the face and arms. The patient is a man of temperate habits, does not drink or smoke much. He gives a history of eating a Welsh rabbit with some friends on the 20th of November, and in two or three days all of the party had gastric disturbances (Pto-mainé?), but he is the only one who has had any skin trouble. The urine has been examined and found negative. He is an agent or drummer, a busy man, and has to be out of doors a great deal, and is suffering now from being confined. The lesion itches considerably and smarts more. The urine when he first applied for treatment was scanty, but this has been increased by diuretic treatment. It has not been examined for indican.

There seemed to be a general agreement in the diagnosis. DR. FOX suggested

that if the patient should lose ten or fifteen pounds in the course of the next two or three weeks by strict dieting he would get well quicker than on local treatment.

**Tuberculosis of Right Hand. (?) Presented by DR. WHITEHOUSE.**

This case was presented by Dr. Whitehouse at the January meeting of the Society for diagnosis. It will be remembered that the lesions involved the back of the right hand and wrist, were ten years in duration, and began from an injury by shoemaker's thread, the inflammatory lumps that developed being punctured by his shoemaker's awl. Four months previous to his coming under observation he suffered loss of vision in one eye, which improved while taking drops from the eye and ear infirmity. From his description these drops were undoubtedly iodide of potassium.

The question in January was whether it was syphilis or tuberculosis. The general consensus of opinion was that it was syphilis. A biopsy was made and smears taken, and the patient submitted to mixed treatment. He was presented again a month later, at the February meeting, with a very great improvement in the condition. The pathological report was presented at the same time, pronouncing it an epithelioma extending deeply into the subcutaneous tissue; cell nests or "pearls" were very numerous; smears from one of the large lesions and from the purulent thin fluid discharged from a smaller nodule were negative for tubercle bacilli, actinomyces, and spirochæta pallida; cultures gave a pure growth of streptococcus.

One or two of the lesions that had not yet yielded to anti-syphilitic treatment had an indolent warty appearance, and it was suggested that epithelioma might possibly exist, having developed upon the syphilitic base. Further anti-syphilitic treatment was advocated, and another pathological examination advised if all did not heal. He neglected treatment for two months, and returned early in May with the condition practically the same as when first shown. The same treatment was again instituted, together with mercurial plaster locally. He improved steadily until early in August when he again disappeared.

He returned yesterday after an absence of four months, during which time he had taken no treatment. The condition had improved so much that he went to work. Two weeks ago he fell, forcibly extending the thumb and forefinger of this hand, following which is the condition he presents to-night—a typical acute tubercular joint, with involvement of wrist joint and carpal bones. A serous fluid can be squeezed from some of the skin lesions, and there is a rather typical tubercular condition of the skin of the original area.

He is presented to-night, believing that in the light of subsequent developments the study of his past history, would be both interesting and profitable. He would call particular attention to the ten years' duration of this trouble, the manner of its inception, the eye condition and its im-



provement under potassium iodide, the great beneficial effects of mixed treatment, and the pathological findings from the skin sections, smears, and cultures.

DR. JACKSON said that he did not see that the present condition of the patient throws much light on the diagnosis. He has had a fall and has a sprained and swollen wrist. He would hesitate to call this a tubercular joint, for it has developed very recently and quickly. The original lesion got well under mercurial treatment, and from the present appearances he could not see that much progress had been made in the diagnosis. All things considered the evidence seems to be in favor of syphilis.

DR. FOX was inclined to think the case specific in character—mainly from its appearance, and from the condition which is so often seen in the ankle. Many such cases used to be known at the New York Dispensary as the "syphilitic hoof," the bones being greatly enlarged with superficial nodules. He had several photographs of such cases, presenting almost the same appearance as this one. With the additional history of having improved under specific treatment, he would certainly be inclined to consider it of specific origin.

DR. PIFFARD said that a course of specific treatment for three or four weeks should determine positively whether or not it was syphilitic.

DR. JOHNSTON said that he saw no reason for a change of diagnosis which could be determined by treatment. There was a history of considerable injury here, and the arthritic condition might easily be referred to the injury and not to a specific process. In other words, the man may have a sprained wrist, which will go down in time. If he uses it, it will not go down at all.

DR. WHITEHOUSE reminded the members that when the case was first presented it had certain tubercular features which were hard to deny, particularly the character of the discharge from the nodules. The young man was very emphatic about the serous character of this discharge, and also about the ten years' duration of the process; there had been no pus from the nodules at any time. The improvement on mixed treatment had been more marked he thought than would occur in a plain tuberculous case, and the occurrence of the eye trouble and its disappearance under iodide of potash would seem to point clearly to there being syphilis also present. He felt confident that the present condition is tuberculous, and saw no reason why the two should not exist, one changing the character of the other. He did not see how the eye trouble could be reconciled with the tubercular joint, which has been so pronounced by competent surgeons. The only way to do is to accept that he has both conditions. Subsequent progress of the case will be reported.

#### **Adenoma Sebaceum of the Chest and Back. Presented by DR. FORDYCE.**

The patient was a young man about twenty-one years of age who had a congenital heart lesion giving rise to persistent cyanosis. He had a well-marked acne of the face and trunk. In addition to the multiform lesions of acne, he had an enormous number of milium-like lesions over the chest, back, and face. They were larger, however, than the usual milium, and each had a central punctum similar to those seen in adenoma sebaceum. The lesions were unlike those seen in the usual type of the so-called adenoma sebaceum of the face, where they are more or less crimson in color due to the telangiectases. Here they were more or less



translucent and different from the dead-white of the ordinary milium lesion. The histological examination showed them to be made up of sebaceous glands much increased in number over their normal condition.

**A Case of Unilateral Sweating.** Presented by DR. DADE.

Man, thirty years old. Trouble came on seven years ago without cause known to him. Right side of head, face, and neck always sweating, while left side is dry. The sweating is more pronounced after drinking a glass of beer or when he is cold. No subjective symptoms. Merely being a source of annoyance, for at times the hair is saturated and the sweat pours down over his collar, which is in an almost constant state of wilt, as may be seen at present.

In accordance with Dr. Lustgarten's suggestion, the patient would be put upon anti-syphilitic treatment.

**Necrotizing Chilblain.** (Previously shown.)

Presented by DR. WHITEHOUSE.

This case was presented at the previous meeting of the Society, and Dr. Whitehouse, instead of reporting on the case, asked the patient to come before the Society again and let the members see the improvement after a month's treatment, with iron and arsenic, and white precipitate locally. The lesions on the ear have all cleared up, which he thought would not be the case with the ordinary type of necrotic granuloma.

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SECTION ON DERMATOLOGY.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, OCT. 29, 1907.

Dr. A. R. ROBINSON IN THE CHAIR.

**Xanthoma Tuberosum Multiplex.** Presented by Dr. W. S. GOTTHEIL.

John S., 28; oysterman. Two years ago he first noticed the eruption, which began at the same time on the knees, elbows, hands, and buttocks. Since that time the individual lesions have been steadily getting larger, and new ones have appeared in their neighborhood. Has never consulted a physician about them, as they caused no inconvenience; and he comes for treatment now only because the growing tumors on the backs of his hands and wrists interfere with his work.

Examination: All the lesions, varying in size from a pin-point to a small marble, are typical pale yellow, yellowish-pink, and orange colored, prominent, sharply circumscribed xanthomata. Most of them are grouped in characteristic locations, but many of them are isolated or scattered over various parts of the body. Both knees are covered with

closely aggregated and sometimes confluent smaller tumors, and there are similar aggregations on the buttocks. Both elbows are similarly though less extensively affected; and here some of the individual tumors are quite large. On the backs of both hands are isolated and larger prominent tumor masses, for which he seeks relief. The skin of the sides of the chest shows a great number of very minute, but perfectly characteristic xanthomatous tumors, of the existence of which the patient is entirely unaware.

Treatment: An attempt is being made to destroy the larger individual tumors on the hands by means of the high tension spark applied by means of a carbon point electrode. A smaller one has apparently been destroyed by one application. On a larger one the effect was immediate bulla formation, resembling that from cauterization or freezing. The process is moderately painful, and in this case can be done without local anæsthesia. Speaker had obtained good results in another similar case by this method.

#### Method of making snow from liquid carbon dioxide for dermatological and surgical use. Exhibited by S. DANA HUBBARD, M. D.

In presenting this drum of liquid carbonic gas, I am showing you something that is familiar to all, and something that can be obtained at short notice in almost every place in the whole world. In fact in the industries it is in almost universal use. It has been manufactured by one firm alone for twenty years, and with branch establishments in all of the prominent cities. In addition to the ease with which it may be obtained, it also has the additional advantage of being able to be kept on hand ready for use at any time. The use which I am going to make of this particular drum is quite novel—that is to some; but by others it has been used some months.

Permit me the reference—that in 1900 Dr. A. Campbell White, an associate of Trippler, presented liquid air for our use at the Vanderbilt Clinic. With the kind permission of Professor G. H. Fox it was experimented with alongside of radium under the charge of Dr. S. G. Tracey, in various cases and with some degree of success; but after many years of experience we all had the same difficulty in obtaining it—in fact, to-day most of us do not know where to obtain it—and to use it, requires a more or less expensive apparatus—Dewar bulb and encasings, costing about seven to nine dollars, and at that is very fragile. “Air” also is very volatile. “Air” does its work splendidly, but with its costliness, the uncertainty of getting it at the desired moment, its volatility, and the danger of handling it makes the most ardent supporter of its use hesitate. I have been so often disappointed in obtaining “Air” that it was a case of obtaining it and then sending for my patients. Also there is a great element of danger in its making.

Comparatively "Air" is about  $-180^{\circ}$  Centigrade, "Snow"  $-90^{\circ}$  Centigrade. "Air" costs to-day \$10.00 a gallon—\$2.50 a liter—and you must furnish your own container. You must also send for it. It will not be delivered at the hour wanted.

Liquid carbonic gas, from which we make snow, costs \$2.50 a drum of 20 gallons; it will be delivered at anytime anywhere, and the drum can be kept on hand and await desire of user. One drum will last indefinitely and many treatments can be made—a hundred or more.

Shortly after the introduction of "Air" and the various shortcomings becoming apparent, I began to look about for a substitute. I tried ethylated spirits—they failed, not freezing deep enough. Then the ammonia machines were investigated and they did not make cold sufficient for the purpose—then finally liquid carbonic was investigated.

I visited the sub-agency of the liquid carbonic company in West 107th Street, and there the foreman, at his noon hour, showed me how they could freeze meat—freezing quickly a piece of ham from a sandwich and throwing it upon the floor—breaking into many pieces. He repeated the process and I found that it froze quickly one-fourth to one-half inch deep. This seemed to me to solve the problem if it could be bridled.

I had a drum sent to the Vanderbilt Clinic and we then endeavored to apply it. The force of expulsion when the tank was opened was something terrific. We had made up various mechanical contrivances, some of which I show you; but our results were disappointing. The patients were frightened—the noise was terrifying—the vapor enveloping every one with considerable discomfort. The receptacle would sometimes freeze to the patient and we would have to await its thawing. This was at times ludicrous and at times disturbing, as we feared it would tear away from the struggling patient.

This was very unsatisfactory—it did not freeze sufficiently deep and our hopes again appeared to be fading away.

Naevi frozen by this method did not respond. They would be blistered and scab over, but on desquamating the color would soon return.

About this time Dr. George Thomas Jackson, our Chief of Clinic, learned of a method by Dr. W. A. Pusey of Chicago. He described it to us, but we did not seem to catch the knack of it and again we failed.

Lately, however, at the Dermatological Congress I had the good fortune to meet Dr. W. A. Pusey and informing him of my various misadventures, he very kindly volunteered to show me his method. With him I repaired to the liquid carbonic company, and we there made a ball of snow and brought it up to the Academy and used it on some of my cases.

The method I am going to show you this evening, is in general the method of Dr. Pusey. I desire that all credit be given to him; also at this time I desire to thank him for his great courtesy to me.



## METHOD

Take a filled drum, place it on a shelf or table; *elevate* the bottom about eighteen or more inches. This assures snow being more quickly formed, for if there is any liquid in the tank, it will gravitate to the cock. Also snow made from the liquid is more moist and easier molded.

Fix the drum in place or have it held firmly. The opening cock is as a rule hard to turn—and when through using turn it off hard, to prevent leakage.

From the side of the head there is a brass hexagonal nut—unscrew this with a monkey-wrench—place on a shelf and be careful not to loose the composition washer within nut, when it is returned to tank.

Over this screw threaded outlet wind double-folded chamois skin folded as you see, and then either bandage in place or hold so by a towel, wound around several times. When secure, open the cock at top of tank with the little socket wrench that accompanies the drum. Open full—soon there will be a bursting out of vapor and snow particles. Quickly turn off cock—turn off hard. Remove bandage or towel. Use great care in removing the chamois skin, as it is frozen hard, and if force is used it will tear.

Dr. Pusey makes a small bag of chamois two inches in diameter, tying it to tap. I find I tear the skin if I do and also it is hard to peel out the snow when it is frozen stiff. If the tank is new there will be moist snow which can be molded with the hands, using the chamois skin folded upon itself as a protection, or the fingers will be injured.

If the snow is very dry use little tubes made of test-tubing, or water gauge tubing (which is of heavier caliber), and pack it with a rod or pencil end.

If the chamois skin has been neatly applied and properly folded there will be a cigar shaped mold of snow, which can then be whittled with an ordinary knife blade down to the size desired. Always use a smaller piece of snow than the size of the growth to be frozen, as it freezes quite a little distance beyond its own area, and on exposed parts, like the face, this makes a red mark that is undesirable. Pick up the skin with the fingers and hold firmly so that the growth is itself elevated and the surrounding tissues are not attacked by the cold. Hold the snow with a piece of chamois skin folded upon itself or a towel folded several times, or with a pair of dressing forceps, exerting pressure of snow onto growth. *Time* the exposure, for this, in a measure, determines the depth of the freezing. Five seconds will remove the top cellular layer. Ten seconds will attack the papillary layer—useful for removing tattoo marks—and for deeper growths 20 to 30 to 40 or more seconds. In some cases it is well to freeze the tissue solid; let it thaw out and repeat the process. This latter is very good in hypertrophied conditions as callosities, tattoo marks, pigmented moles, naevi, warts, etc.



Permit me to caution you that in the pigmented moles be very cautious about informing the friends of the permanence of the removal; for in one of my cases, a lad of thirteen years, a black pigmented mole removed with liquid air from the chin with apparently a perfect result, returned as intense as formerly in three years. Large coarse hairs are at times very rebellious. In certain races bear in mind the formation of keloids. I have not seen any appear as yet, but from the use of acids they have been caused several times at the clinic. Regarding the pain caused by the operation, I have had my arm frozen by the snow and it was painless; there was a redness, followed by a wheal, resembling an urticarial lesion, and in time swelling, with the formation of a vesicle which soon shriveled and scabbed and desquamated, leaving a snow white scar level with the surface. In certain areas, about the nose, eyes, it is quite painful. Once in operating on the temple I had to discontinue on account of the severity of the pain; but here I think I was irritating a sensitive nerve. However, I generally tell patients it does not hurt much, and after the operation is over ask them if it pained them more than they had expected. Some are hyperæsthetic and others not so much so.

The scar in both "Air" and "Snow" freezing is about the same. It appears to be a cellular affair—non-contracting—does not sink below skin surface and is snow white.

#### DISCUSSION.

Dr. DADE: Seven years ago last April, on a case of the fixed form of erythematous lupus, which had resisted every method applied to it by us at the Vanderbilt clinic, I first used liquid air. The areas treated then have remained cured to this day, and I have shown the case several times. Since then erythematous lupus of the fixed type has been treated with liquid air at the clinic to the exclusion of everything else, except for experimental purposes, for nothing heretofore had given us anything like the results it gives, and even it in some long-standing cases has been but partially successful. Since this first case the use of liquid air at the Vanderbilt clinic has been almost exclusively in my hands, principally in the treatment of angiomas, but I have not yet published my cases, as I am waiting to complete some experiments on rabbits' ears, undertaken to study the action on the tissues of liquid air before giving out anything on the subject. Radium, as Dr. Hubbard says, was persistently used side by side with liquid air, and long ago given up as vastly inadequate in comparison. Up to September last, when Dr. Pusey, at the meeting of the Dermatological Congress, showed Dr. Hubbard and me his method of using carbon dioxide, this agent had given us no results whatever. Since then Dr. Hubbard has been using it systematically after Dr. Pusey's method. As yet not enough has been done to make any comparison with Dr. Pusey's excellent results, or to show its merits over liquid air; certainly the cases shown to-night, especially of pigmented hairy nævi to which five applications of carbon dioxide have been made, would have been removed before this by liquid air, if we can judge from what it has done in the past in similar cases. The patients' testimony at the clinic on whom both the agents have been used would seem to be of some value, for they one and all say the liquid air is much surer and quicker in its action; at any rate they seem to prefer it. There

are two advantages as to its application that the carbon dioxide seems to me to have that Dr. Hubbard does not mention—first, its adaptability to very small naevi, for here the column of snow can be made any size; and second, the ability to so fashion the piece of snow as to exactly conform to the outline of the lesion to which it is to be applied. There is no difficulty now in obtaining liquid air. The Westinghouse Lamp Co., 513 W. 23d Street, furnishes it regularly, and the New England Refrigerating Co., Norwich, Conn., will send it anywhere desired.

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## CHICAGO DERMATOLOGICAL SOCIETY.

MEETING OF NOVEMBER 29, 1907.

DR. R. W. BISHOP, CHAIRMAN, *Pro Tem*.

**Case of Congenital Syphilis.** Presented by Dr. W. A. QUINN.

The child, 10 months old, was well nourished and according to the mother's statement had always been healthy. One week ago a few "spots" appeared on the forehead. At present there is a group of six or eight papules about each eye-brow. The mother gives a history of having had one still-birth, one miscarriage, and one child, who when four years old showed a skin eruption which cleared up under mercurial inunctions.

**Lupus Erythematosus, Unusual Case of.** Presented by Dr. ZEISLER.

The patient, a man of forty-eight, presented an interesting facial dermatosis, which had existed for the past fifteen years, recurring at irregular intervals and responding always to treatment by X-rays. There were several superficial ulcerations; one of these had involved the right lower eye-lid and caused an ectropion; another was situated on the corner of the right ala nasi, and one was present in the center of the right cheek. There were also several isolated circumscribed dry lesions covered with loosely adhering grayish crusts and scales. Dr. Zeisler excluded syphilis, rodent ulcer, and blastomycosis, and presented the case as an unusual form of lupus erythematosus.

**Case of Blastomycosis.** Presented by Dr. W. A. PUSEY.

The patient was a man aged 63. The disease appeared six months ago; the lesion involved the inner two-thirds of the back of the hand extending from the base of the index finger to the wrist and from the base of the thumb over two-thirds of the breadth of the hand. The patient was a carpenter who lived under good hygienic conditions in a town of 20,000 inhabitants.

**Case of Psoriasis.** Presented by Dr. ZEISLER.

The patient demonstrated presented features rather uncommon in psoriasis. He was a pianist by occupation, and the eruption was present in a severe form on all the fingers, and on the palmar surfaces of both

hands. The picture in the latter location resembled strongly a squamous popular syphilide. There were a few small patches on the scalp, but the body was almost completely free of lesions. The practical restriction of the eruption to the hands, which were severely affected, was interesting and suggested his occupation as a strongly predisposing factor.

**Case of Ichthyosis.** Presented by Dr. QUINN.

The usual fish-scale appearance was presented by the patient, a five year old boy with blond hair. His maternal grandfather is reported to have had a similar skin affection.

**Case of Universal Psoriasis.** Presented by Dr. WM. A. PUSEY.

Man, aged 50, with almost universal psoriasis. The face, palms, and soles were entirely involved and but for occasional small islands of healthy skin, the eruption was universal.

**Case for Diagnosis.** Presented by Dr. W. A. PUSEY.

Man, aged 55, with a peculiar eruption which had existed since childhood. The eruption consisted of macules, some of them very slightly elevated, from 1-16 to  $\frac{1}{8}$  of an inch in diameter. They were of pinkish to dark red color and disappeared under strong pressure. In a few of them, particularly on the arms and legs where the color was deepest, slight pigmentation was present, shown upon pressing out the blood. The lesions were discrete but were abundant upon the sides of the trunk and the inner aspect of the arms, thighs and legs. A very sparse eruption existed upon the anterior surface of the trunk; very little upon the back and extensor surfaces of the limbs. There were none on the hands, face or neck. The eruption was distinctly symmetrical. It had existed since childhood and has never given the patient any discomfort.

In early manhood the patient suffered occasionally from urticaria, but this was never severe and he never had long continued intractable urticaria. There were no wheals present nor the history of a recent occurrence of wheals, but factitious wheals could be excited by rubbing any point upon the skin, not more noticeably at the sites of the lesions than upon other parts of the body. The case was first seen by Dr. Pusey more than a year ago and has remained unchanged during the interval. The patient, a physician, is positive that the eruption has not changed for many years.

The clinical picture was regarded as unique; it was distinctly not that of urticaria pigmentosa, although in the opinion of those present as far as it was expressed, the condition was allied to urticaria pigmentosa.

**Case of Disseminated Chronic Lupus Erythematosus in Large Patches.**

Presented by Dr. W. A. PUSEY.

Man, aged 60, German, in vigorous health, with erythematosus lupus,



existent since early manhood. The disease occurred in patches, varying from coin size to a foot or more in diameter. The scalp and half of the face or neck. The eruption was distinctly symmetrical. It had existed since childhood and has never given the patient any discomfort. patches with a diameter of 8 to 10 inches; in the left thigh there was a patch covering almost the entire extensor surface.

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## REVIEW OF DERMATOLOGY AND SYPHILIS.

Under the Charge of A. D. MEWBORN, M. D.

### BACTERIOLOGY AND PARASITOLOGY

#### Sporotrichosis

A Digest Review By A. D. MEWBORN, M. D.

SCHENK: On refractory subcutaneous abscesses caused by a fungus possibly related to the sporotricha. *Johns Hop. Hosp. Bull.*, 1898, p. 286.

BRAYTON: Chronic Abscesses. *Ind. Med. Jour.*, 1899, p. 272.

HECTOEN and PERKINS: Refractory subcutaneous abscesses caused by the *Sporothrix Schenkii*, a new pathogenic fungus. *Jour. Exper. Med.*, 1900, p. 77.

DE BEURMANN and RAMOND: Absces sous-cutanés multiple d'origine mycosique. *Ann. Derm. e Syph.*, 1903, p. 678.

MATRUCHOT and RAMOND: Un type nouveau de champignon pathogène chez l'homme. *Compt. Ren. Soc. Bio.*, 1905, p. 379.

DE BEURMANN and GOUGEROT: Les sporotrichose hypodermiques. *Ann. Derm. Syph.*, 1906, p. 837, p. 914, p. 993.

DOR: "La Sporotrichose." *La Presse Med.*, 1906, p. 234.

MONIER-VINARD: Formes cliniques et diagnostic de la sporotrichose. *La Presse Med.*, 1907, p. 426.

GAUCHER: La Sporotrichose. *Gazette des Hop.*, 1907, p. 795.

RUBENS-DUVAL and FAGE: Un nouveau cas de sporotrichose gommeuse cutanée et sous-cutanée. *Bull. Soc. Med. d. Hop.*, 1907, p. 380.

LAUBY and ESMEIN: Un cas de sporotrichose sous-cutanée et cutanée. *Bull. Soc. Med. d. Hop.*, 1907, p. 386.

DE BEURMANN and GOUGEROT: Sporotrichoses. *La Presse Med.*, 1907, p. 481.

DE BEURMANN and GOUGEROT: Sporotrichose tuberculoides. *Ann. Derm. et Syph.*, 1907, p. 497, p. 603, p. 655.

DEMOULIN and RUBENS-DUVAL: Nouveau cas de sporotrichose. *Gaz. des Hopitaux*, 1907, p. 1098.

The first two cases of this dermatomycosis were observed in America by Schenck in 1898, and by Hectoén and Perkins in 1900. The histories



of these two cases were similar in that the infection started from a wound of the finger which was followed by multiple subcutaneous abscesses running up the arm along the lymphatics. These abscesses were not painful, some opened spontaneously and others were opened surgically and found to contain an aqueous or gelatinous fluid. From this was isolated the sporothrix *Schenkii*.

The case described by Brayton in 1899 occurred in a healthy young florist who punctured a finger with a wire while making a bouquet. A succession of chronic abscesses with gelatinous contents appeared, extending during a period of two months from finger to elbow, much scarring being left behind. Case not examined bacteriologically. The three cases have much in common, in all a succession of small abscesses developed consequent upon injury by similar means. Schenk's case the scratch of skin of finger by a nail, in Perkin's case the blow upon the finger by a nail, in Brayton's case the puncture of finger by a wire. All three cases marked by the refractory nature of the subcutaneous abscesses.

In France the first case was described by De Beurmann and Ramond (1903), and the parasite which was isolated by culture from the lesions of their patient was identified by Matruchot, who proposed the name of *Sporotrichium Beurmannii*. In 1906, De Beurmann and Gougerot, having observed three new cases, published a very important study of the cultural and morphological peculiarities of this organism. De Beurmann places the cases described by Schenk, Hectoen and Perkins, as well as one described by Brayton, in the same category as caused by a fungus similar to his sporotrichium. Since De Beurmann's paper cases have been described by Monier-Vinard, Dor, Gaucher, Rubens-Duval and Fage, Lauby and Esmein bringing up the total to thirteen cases with positive determination of the parasite.

*Symptomatology.* The port of infection is most often through a wound (punctured, incised or contused), a trace of which may be found when the first manifestation of the disease appears. At other times the method of acquiring the disease remains a mystery. De Beurmann found the sporothrix in the lacunar crypts of the tonsil in one of his cases. He succeeded in reproducing the lesions of disseminated sporotrichosis in a new-born guinea-pig by feeding it upon milk mixed with cultures of the sporothrix. The manifestation may be dermic, hypodermic, rarely epidermic, exceptionally visceral. Infection of the subcutaneous tissue terminates in the formation of a true cold abscess which may attain size enough to hold 500 c. c. of pus, having subjective and evolutive character of a tubercular abscess differing principally in greater numbers. Usually the subcutaneous lesions develop insidiously along the limb in the form of painless nodules from the size of a pea to a small mandarin, seldom less than five in number. To palpation they are firm and attached to subject aponeurosis. At the end of two or three months they soften, the skin reddens, becomes violaceous and finally a viscous, homogenous, grey-yellow pus escapes through a small

orifice. This orifice may become a large fistulous opening with swollen edges and new infiltrations. In the end this suppuration diminishes and a violet cicatrix or keloidal scar remains. Incision by the bistoury does not hasten the curative process, as new nodules form in the line of incision. Such an evolution may be looked upon as the most favorable, as sometimes the ulcerating crust covering a fistulous opening may leave a patch exactly simulating a verrucous tuberculosis. In the majority of cases in spite of the extreme dissemination of the lesions and the fact that lymphatic chains are affected the lymphatic glands often remain unaffected; unless with an open sinus secondary infection takes place.

The disease may develop in the skin by an extension upward from a subcutaneous nodule or it may develop primitively in the dermis. This form is described in a patient of Monier-Vinard who developed upon the face a large number of rounded nodules the size of a franc piece distinctly elevated of the color of barley sugar (*sucre d'orge*). The surface at first smooth and humid became after two or three months rough and covered with a yellowish coating. The cicatrices remaining took on the aspect of those left by a lupic tubercle.

The epidermic form arises secondarily to the evacuation of a hypodermic abscess by multiple surface inoculations. Opaline vesicles form around the central opening resembling somewhat a patch of trichophytosis. The sporotrichium was found by Monier-Vinard in the expectoration of a patient who was at the same time affected with a pulmonary tuberculosis. This was probably a visceral form in a case of mixed infection such as has been found in actinomycosis.

*Cultures.* The best culture medium is that of Sabouraud recommended for studying the trichophytons. Streak cultures are made upon this medium of the pus taken from the suspected lesions. The usual precautions are taken to avoid contaminations. Avoid the use of rubber caps over the cotton plugs. Keep cultures preferably at room temperature. On the sixth to eighth day small round white colonies appear along the line of streak. The cultures are very adherent to the medium, spread, become elevated and wrinkled, and take on a dark brown color from the formation of spores. In bouillon the growth may form a veil or a flocculent down without the medium becoming cloudy. In the hanging drop the parasite appears as a fine ramified mycelium, with partitions at long intervals. Short sterigmata hold oval or ovate spores. The terminal filament may be capped by a bouquet of spores to the number of seven or nine.

*Animal Inoculations.* De Beurmann succeeded in inoculating newborn guinea-pigs, but with inferior results to that obtained by inoculating the rat's foot. By the latter method the author succeeded in producing a sporotrichotic gumma with hypodermic metastasis.

*Differential Diagnosis.* The large hypodermic sporotrichotic abscess resembles very much the cold abscess from bone tuberculosis. The

absence of painful points over bone or joints and the multiplicity of lesions are useful in forming an opinion. The disseminated nodular or lymphangitic form may be confounded with sub-cutaneous fibrolipomata, generalized sarcomatosis, cysticerous or staphylococcic abscesses, syphilitic gummata, tuberculosis or the subcutaneous sacoid of Darier-Roussy. The dermic form may simulate exactly certain lupiform syphilides. Dermic sporotrichosis may also resemble certain atypical forms of cutaneous tuberculosis. In fact, the existence of syphilis or tuberculosis cannot be used as an argument against sporotrichosis since the two affections may coexist. It is upon the laboratory and especially the test of cultures upon which greatest reliance must be placed.

The histological picture too closely resembles tubercular or syphilitic lesions to be reliable.

The last three papers of De Beurmann and Gougerot are particularly devoted to the histological study of the sporotrichosis lesions. To resume, these authors found that sporotrichosis is a chronic nodular suppurative affection. Certain chronic lesions due to cocci have the same three zone arrangement. The same mixture of inflammatory reactions,—basophile, tuberculoid, and suppurative. The same evolution towards the polynuclear and macrophagic abscess. It is then more the chronic coccic suppurations to which it must be compared than to the syphilitic or tubercular processes. It only partially resembles the latter two affections. It resembles tubercle by its middle zone and syphilis by its middle and specially by its outer zone of reaction.

The nodular infiltration, the giant cell, the follicular suppuration are not specific to any one parasite, but are general reactions set in motion by different causes having a mode of action identical in their force and duration.

There is not an anatomic specificity but a specificity of the causal parasite. If different causal agents have the effect of producing the same reactions the lesions will be similar. The sporotrichium and the tubercle bacillus may cause almost identical lupus like follicles. If the mode of action of the same germ varies it may produce different lesions, that is, the sporotrichium may determine lesions of a syphiloid, tuberculoid or ecthymatiform character.

*Prognosis and Treatment.* The prognosis is rendered clear by the extreme efficacy of the iodide treatment. The resort to surgical means is contraindicated except in the case of voluminous pus collections, on account of the extreme liability of infecting the borders of the incision by new infiltrations. The multiplicity of lesions renders complete ablation difficult. Iodide of potash is to be given by mouth in doses of 2 to 5 grammes per day.

The local application of compresses saturated with iodide of potash solution to open lesions gives remarkably favorable results. In almost every case a complete cure ought to be obtained in from two to four months.



## BOOK REVIEWS

Syphilis in its Medical, Medico-Legal, and Sociological Aspects, by A. RAVOGLI, M. D., Professor of Dermatology and Syphilology in the Medical College of Ohio, Medical Department of Cincinnati University, Dermatologist to City Hospital of Cincinnati, etc. The Grafton Press, New York.

Syphilis, in respect to its effects upon the productivity, the vitality and physical progress of the race, must be regarded as a greater danger to society than to the individual. The danger of syphilis to the individual is not measured by its immediate effects upon the health or life, but by its capacity of inaugurating changes in the organs essential to life, which weaken their capacity of resistance and render them an easy prey to other processes of disease at a more or less remote period. While recent acquisitions to our knowledge of the pathology of syphilis have amplified our conception of its individual danger—particularly in its late or terminal stages—this newer knowledge has served to especially emphasize its significance as a social danger.

It was doubtless an appreciation of this fact that led the author of the work before us to make a departure from the method usually followed in treatises on syphilis and plan his work on a more comprehensive scale. Instead of confining himself to an exposition of the medical aspects of syphilis, he has devoted a large portion of his book to the consideration of its medico-legal and sociological aspects.

After referring in his preface to the profound impression made by syphilis on the nervous system and the "alterations in the psychical sphere" resulting therefrom, he states: "It is, therefore, easily understood that all these questions pertaining to the syphilitic alterations in the man who becomes infected, and to all his relations to his wife, to his family, and to society, form a vast and important sociological study which we shall carefully consider in all its details."

In Part I, which relates to the medical aspects of syphilis, the initial chapter is devoted to a historical account of "The Search for the Causal Agent," leading through the investigations of Klebs, Lustgarten, Van Niessen, Jullien, Joseph and Piorkowski, and other claimants, and culminating in the discovery of Schaudinn and Hoffmann in 1905. The *spirochæta pallida* is unqualifiedly accepted by the author as the germ producing syphilis. It may be said that while the rigorous conditions demanded by modern science have not been complied with in the case of the spirochete, especially its successful culture outside the human body, yet its more or less constant identification in the blood and lesions of syphilitics affords strong presumptive evidence of its causal relation to syphilis.

This part of the work offers nothing which requires special comment or criticism. The description of the pathology and symptomatology of syphilis conforms in the main to what is usually found in text books on syphilis designed for the use of the student and general practitioner. The author's observations on treatment, its character and duration, the choice of methods, etc., reflect the views generally held by modern text book authorities.

Comment may be made upon the relative space and importance assigned to the natural divisions of the subject matter: Thus, less than 25 pages are devoted to "Syphilitic Affections of the Skin and Mucous Membranes," while the chapter on "Syphilis of the Nervous System" occupies 30 pages. Less space is given to the chapter on "Constitutional Syphilis" than to that on "Transmission of Syphilis to the Offspring." The greater relative importance given to nerve



syphilis and pseudo-syphilis may be explained on the assumption that the author wishes to lay the groundwork for his thesis on the sociological significance of the disease by emphasizing its dystrophic and degenerative changes in the offspring, and its no less pronounced alterations in the sphere of the nervous system.

In Part II the medico-legal and sociological aspects of syphilis are considered under the following headings: Syphilis and Marriage, Syphilis in Relation to Degeneracy, Syphilis and the Public Health, and the Regulation of Prostitution in the Prophylaxis of Syphilis. The important relations of syphilis with marriage are duly recognized, and the conditions of admissibility of a syphilitic man to marriage long ago formulated by Fournier are insisted upon in a general way. Dr. Ravogli's recipe for safeguarding marriage from syphilis is the enactment of a State law requiring of every candidate for marriage a medical certificate from an expert appointed by the Probate Court. Certain objections of Morrow, whom he quotes at length, based upon the difficulties in the practical application of such a law, he dismisses as a mere "bugaboo." "The objection that many aspiring to marriage will go to another State where such a law is not in force may be true, but we do not care. Anyone who has done anything wrong and wants to evade the law may do so if he chooses; he will suffer the consequences." Unfortunately, it is not the evader of the law, but his innocent wife and children who will suffer the consequences.

Syphilis as a cause for divorce, the medical secret, professional ethics, and syphilitic patients are considered in this connection.

The chapter on syphilis in relation to degeneracy, the decadence of populations, as a predisposing cause of crime, of prostitution, and of sexual perversion, reflects perhaps more than any other part of the book the personal views of the author. Many of these views are valuable and suggestive, while others rest upon a slender support of facts and appear quite indefensible.

The contention is made that syphilis is not a disease of antiquity, but first made its appearance in the Old World with the return of Columbus and his followers, and "spreading epidemically with no treatment at all, or with an inadequate one, was transmitted to the second and to the third generation." We cannot follow Dr. Ravogli in his remarkable historical disquisition upon the influence of syphilis as a factor in the decadence of the sixteenth century. He concludes: "From all that which we have considered in this chapter, we can state that a new and unknown disease, syphilis, had made its appearance among the people. The decadence began to appear nearly fifty years after this disease had spread in an epidemic form among the individuals of the social classes. By this time we have two generations: one which had acquired syphilis, and one which had inherited syphilis. If syphilis at our age often affects the nervous system and is capable of inducing psychoses, at that time it could in the same way produce mental disorders. When syphilis has acted in the individuals as an hereditary taint on the descendants of the first and second generations, then it is capable of inducing forms of psychoses of a peculiar kind which give us the right to consider it the reason for the decadence of the sixteenth century." This reasoning and conclusion will hardly meet with general acceptance. We can no more ascribe "the murders, the carnages, and the pillages" of the sixteenth century to syphilitic psychoses, than we can, as the author asserts, "attribute a good part of the carnivals of blood, of pillages, and of persecutions which are at present enacted in Russia to the excitement of the psychical faculties due to syphilitic disturbances of the brain."

Quite extended consideration is given to syphilis as a predisposing cause of crime. The author asserts that a strange relation exists between syphilis, crime and prostitution. The statement that "Prostitution which frequently cannot be explained or excused by poverty or by special accidents is to be attributed to hereditary syphilis," is open to serious question.

Under "Syphilis and Public Health" are considered Syphilis and Life Insurance, Public Prophylaxis, Causes of Prostitution, Sanitary Consequences, Prevention and Coercion, etc.

In the final chapter on the Regulation of Prostitution in the Public Prophylaxis of Syphilis, Dr. Ravogli proclaims himself a strong advocate of regulation of prostitution by law, but insists that the "application of this law must be left in the hands of the health department of the communities and of the municipalities."

The general appearance and make-up of the book are most creditable to the publishers. The paper is good and the type clear and legible. The illustrative plates, of which there are 16, many of them containing two or more figures, are of unusual artistic excellence.

P. A. M.

*Jahresbericht über die Leistungen und Fortschritte auf dem Gebiete der Erkrankungen des Urogenital-Apparates.*

By PROF. A. KOLLMANN and DR. JACOBY. Published by S. Karger, Berlin, 1907.

The second volume of this work, covering the urological literature of 1906, not only continues the admirably high standard of accuracy and completeness set by the first, but even surpasses it.

We have verified a number of quotations and find them most intelligently abstracted and accurately set down. The slip of a letter here and there is pardonable in translations from a foreign tongue, and sometimes joyous, as in the citation from Dr. Boston-Bangs.

In each section the number of pages has been increased; this increase being greatest of the chapter on kidney and ureter, which has been lengthened by twenty-two pages, and that on diseases of the female, lengthened twenty-three pages.

Moreover, a large chapter has been added on the urinary diseases of domestic animals, and a much more important one reviewing all the books published on urology during the year.

If the work needs a final word of praise, let it be this—the preponderance of German references is much diminished in this present work; counting the authorities cited in three sections taken at random, we find 87 German references, 73 French, 28 American, 12 Italian, 11 English, and 21 of other nationalities. In some clinical sections the French citations actually outnumber the German ones: so catholic a taste merits the greatest praise.

This volume like its predecessor is one which no urologist can afford to be without.

*Atlas der Venerischen Affectionen der Portio Vaginalis Uteri und der Vagina.*  
VON DR. MORITZ OPPENHEIM. Published by Franz Deuticke, Leipzig und Wein, 1908.

This Atlas presents both admirably and adequately the venereal lesions of the portio vaginalis of the cervix uteri and of the vagina.

The plates showing chancroids, chancres, mucous papules, and gummata are both numerous and interesting. Condylomata acuminata are included in the lesions pictured; but curiously enough only one gonorrheal lesion is shown, and that a relatively unusual condition of gonorrheal macules of the cervix.

We foresee that these plates will figure in many a future volume on venereal disease and on gynecology.

*Diseases of the Genito-Urinary Organs and the Kidney.* By ROBERT H. GREENE, M. D., Professor of Genito-Urinary Surgery at the Fordham University, New York; and HARLOW BROOKS, M. D., Assistant Professor of Pathology, University and Bellevue Hospital Medical School. Octavo of 536 pages, profusely

illustrated. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, \$5.00 net; half morocco, \$6.50 net.

A new text-book must fill a new need; for such a thing as a text-book is rarely a long felt want.

This book purports to fill the needs of urology in the largest sense. It begins with a General examination of the patients, Endoscopy, Cystoscopy, Catheterization of the ureters, Care of urethral instruments, Operative preparation, Urine analysis and continues from the Diseases of the kidney, both medical and surgical, to those of the lower urinary organs and of the genital organs in the male, but devoting to the last only 37 out of 512 pages.

The effort to make this book a strictly urological one is thus manifest and is well carried out.

The illustrations are numerous, many of them are original, and some, especially the pathological and operative ones, extremely interesting.

The general appearance of the book is excellent; and here, alas, endeth our praise.

The text shows an unfortunate vagueness in its most important and practical details; indeed, one might characterize some of the statements as worse than vague; let us note a few examples: "Internal urethrotomy is to be performed only when the stricture is at the bulbo-membraneous junction." "In acute anterior urethritis in those cases in which most of the effects of the disease are evident in the anterior urethra, some advocate the passage of the sound into this portion of the urethra; the discharge diminishing very considerably at the end of about the fifth week." If this sentence means anything, it points the moral already insisted upon by Hudibras:

"Ah me, the perils that environ  
The man that meddles with cold iron."

The following quotations, taken from a section on nephrectomy, illustrate another unfortunate feature of this book, viz., the fact that where the authors themselves had the right idea in their minds they fail signally to express it in such a way as to impress the student with the importance of the detail as well as with the technic.

"Before undertaking nephrotomy, it is well to ascertain positively that the other kidney is in a healthy condition; this is often done by ureter catheterization or by examination of the organ and through exploratory incision" . . . "In some cases it is so difficult to get at the pedicle that it may be advisable to leave the clamps in place in the wound for twenty-four hours." . . . "In saturating the wound after nephrectomy, whenever practical three sets of sutures should be employed a deep set for the deep muscles, a middle set, and a superficial set."

In discussing tuberculosis of the kidney, the authors state that in descending infection (the overwhelming frequency of which they do not appear to concede), the lesions "pursue a relatively innocent course and are not commonly diagnosed unless the necrosis of the tissue becomes sufficiently extensive to cause drainage into the pelvis or marked febrile symptoms."

The following sentences illustrate another form of vagueness. "Gomerol, a substance somewhat resembling guaiacol—" "Undoubtedly there is pathologic evidence to support the views of many who have written concerning the diseased conditions of the seminal vesicles" . . . "Early in the history of their catheter life patients may be able to use the catheter three times a week." . . . "Of the newer remedies, probably albargin, in the strength of 1-5000; will give good results."

Such errors as this, and they are extremely numerous throughout this work, must neutralize the advantages offered by its intelligent general arrangement and its excellent illustrations.



## OBITUARY

### ROBERT WILLIAM TAYLOR

Robert William Taylor, son of Robert and Phebe Taylor, was born at Coventry, England, August 11, 1842.

His father was a graduate of Oxford University, and possessed of considerable means. Through the dishonesty of an associate he lost the greater part of his fortune, and came to this country in 1850, bringing with him his wife and only child, Robert W. He died in this city not long after. The widow married William Curtis and removed to Newark, N. J. Mr Curtis soon died and young Robert was left in the care of his mother. He received a good English and classical education up to his fourteenth year, when his ambition led him to seek a business opening with a view to self-support, rather than to be a burden to his widowed mother. This was a matter of choice rather than necessity, as Mrs. Curtis was in comfortable circumstances. Robert's first engagement was as a drug clerk, but his ability and diligence was such that before reaching his twenty-first year he was in virtual charge of one of the most important drug stores in this city.

Later, believing that pharmacy was not a broad enough field, he entered the office of the late Professor Willard Parker as a student of Medicine, and was graduated from the College of Physicians and Surgeons (Columbia University), in 1868. In 1863 he married Jane Webb, by whom he had two daughters and one son, the elder daughter alone surviving him. His wife died in 1881. In 1884 he again married, his second wife dying in 1899.

During the first few years after his graduation he devoted much time to the study of the French and German languages, and later acquired a good working knowledge of Italian.

Taylor at first devoted himself to general practice, locating his office in Amity Street, whence he removed successively to East 12th Street, to West 21st Street, and finally to West 48th Street, where he died January 4, 1908.

Early in his professional career he made the acquaintance of the late Professor Freeman J. Bumstead, whose confidence he enjoyed until the latter's premature decease. Both were men of the strictest integrity, and it is therefore not surprising that the affection between them was profound and lasting, as the present writer, intimately acquainted with both men, can personally testify.

Although Bumstead was no mean scholar, Taylor was much the better





DR. R. W. TAYLOR.  
(Courtesy of *The New York Medical Journal*.)



and a more thorough student, and soon acquired a knowledge of the literature of cutaneous and genito-urinary diseases that was phenomenal. His memory, too, of the details of cases seen many years before, and his ready reference to the works and writing of others, was a constant surprise to his associates.

Taylor's contributions to the periodical literature were frequent and of a quality that very early gained an international recognition. In fact, many of his monographs were superior to anything that elsewhere appeared on the same topics. His first more ambitious work was in collaboration with Bumstead in the well-known volume that bears their joint names. The major part of this undertaking fell on the junior writer. Since then other volumes on cognate topics have appeared, fully bearing out the author's reputation for thoroughness and fidelity to truth.

As a practitioner Taylor was careful and skillful. His early gained knowledge of pharmacy here being of immense service to him. As a genito-urinary operator he was conservative. He never went to the extremes advocated by the late Dr. F. N. Otis, nor did he possess the delicate operative skill of the Nestor of genito-urinary surgery (Dr. J. W. S. Gouley), whom we still have with us.

Taylor was a successful teacher, holding a Professorship at the College of Physicians and Surgeons from 1891 to 1904.

I would like to close by a few words of personal testimony as to Taylor's character as a man, but find none that more eloquently express my own feelings than the following received by me a few days after his death:

"What a useful man he was, and how genial and straightforward—how free from sham and pretense. To have known such a man is a delight and a memory to be treasured. We are none of us young, but the great thing to be desired, it seems to me, is to be useful as long as one stays here."

H. G. P.

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### PROFESSOR OSCAR LASSAR

It is with deep regret that we record the death of Professor Oscar Lassar on December 21, 1907, as the result of an automobile accident about ten days previously. The condition of Dr. Lassar was not considered very serious at the time of the accident, but several days later sepsis developed, to which he succumbed.

Prof. Lassar enjoyed an international reputation among medical men, not only on account of his numerous contributions to dermatological literature and valuable additions to the therapeutics of skin diseases, but also from his diverse interests and activities in other branches of medicine.

Dr. Lassar was born in Hamburg, January 11, 1849. His early education was received at the gymnasium; from 1870 to 1871 he served

in the Franco-Prussian War. Resuming his studies, he received his degree in 1872. He worked in the laboratories of the physiological chemists Hoppe-Seyler and Salkowsky, and studied with Virchow and Traube; he then became the assistant of the physiologist George Meissner in Göttingen; from here he went to Breslau, where he worked with Cohnheim from 1875-1878. It was his original intention to adopt internal medicine as his special line of work, but shortly after settling in Berlin in 1878 he became assistant to George Lewin in the Dermatological Division at the Charité. In 1880 he was made Privatdocent at the University, and a few years later founded his Institute and Clinic at 19 Karlstrasse, where he gave instruction to students and practitioners of Dermatology. This Clinic was one of the largest in Germany, and was annually visited by from 10,000 to 15,000 patients. Dr. Lassar's success in handling patients was largely due to his genial personality, tact, and the interest the patients themselves aroused outside of their diseases, for he considered the human side of medicine quite as important as its scientific or therapeutic side. He was a good lecturer and knew how to interest young physicians and students and to awaken in them a desire and love for the work. He considered Dermatology the one field in medicine best suited for research, and he had high ideals for, in his opinion, the dermatologist must be a good histologist, physiologist and therapist; in fact, must leave no realm unexplored in order to advance the science.

He was a pioneer in cutaneous therapy, and was anxious to disseminate his knowledge that all practitioners might benefit from his experiences. To this end, he lectured and attended society meetings and congresses, where he presented cases, moulages, pictures, etc. He spared neither pains nor expense in his demonstrations.

He likewise had a happy genius for organizing. In 1886 he was an active member in the organization of the Berliner Dermatologische Gesellschaft; in 1890 he was Secretary-General of the International Medical Congress held in Berlin. About fourteen years ago he founded the Dermatologische Zeitschrift. He participated in the organization of the Deutsche Naturforscherversammlung, and was one of the organizers of the Gesellschaft für Sociale Medicin as well as the Deutsche Gesellschaft für Volksbäder. He took a profound interest in all matters pertaining to hygiene and popularized bathing among the poor. In the midst of all his professional demands, he did not neglect the social side of life, and found relaxation in sports and in writing stories for children.

The writer of this sketch was his pupil about twenty years ago, and recalls with much pleasure the stimulating influence and many acts of kindness of this genial and versatile Professor of Dermatology.

J. A. F.



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## FRAMBOESIA TROPICA (YAWS, PIAN, BOUBA).

BY ALDO CASTELLANI, M. D.,

Director of the Clinic for Tropical Diseases, Colombo (Ceylon).

Read by title before the Sixth International Dermatological Congress, New York,  
September 9-14, 1907.

THE disease was first called frambœsia by Sauvage in 1759, on account of the raspberry-like appearance of the eruptive elements. The colloquial name most frequently used in the British colonies is yaws; in French colonies, pian. Other synonyms are parangi (Ceylon), momba (Angola), dubi (Gold Coast), tetia (Congo Coast), framosi (Calabar), aboukone (Gaboon), gattoo (West Coast Africa), Kuenä (Burma), puru (Borneo, federated Malay States), patek (Dutch Indies), tonga (New Caledonia, and Loyalty Islands), coco (Fiji), tona (Tonga Island), lupani tomo (Samoa). In Venezuela and other South American countries the name bubas is much used. Charlot in 1882 suggested the term *polypapilloma tropicum*.

*Geographical distribution.*—Yaws is essentially a Tropical disease, as few, if any, genuine cases have been reported from temperate zones. There are authors, however, who believe that yaws was in the past endemic also in temperate zones; for instance the so-called "button scurvy" disease which was common in Ireland about a century ago, is considered by some to have been a form of frambœsia.

The peculiar disease called sibbens or sivvens, an outbreak of which occurred in Cromwell's armies and in Scotland during the seventeenth century, has been also believed to be yaws.

At the present time cases of a skin disease resembling yaws have been reported by several writers in Greece.

*Africa.*—The disease is very rare in the northern regions of the continent; it is said to be occasionally met with in Algeria; it is apparently non-existent in Egypt, though, according to some writers, fairly common in some districts of the Soudan. Yaws is very common on the West Coast, Congo Free State, on the Gaboon River; it is also found in Mozambique, Angola, Madagascar, and

the Comoro Islands. In Uganda and the region of the great lakes it is occasionally met with. Recently Griffith has observed yaws among the kaffirs in South Africa near Kimberley.

*Asia.*—The disease is unknown in Japan, and in the central and western regions of the continent. It is also unknown in most parts of China. The affection is frequently met with in the Malay Peninsula, Assam, Upper Burma, Siam, Java, Batavia, and is extremely common in Ceylon, where it is known as parangi. The number of cases treated in the Government Hospitals in Ceylon during the last seven years was as follows: 3646 in 1900; 3117 in 1901; 3434 in 1902; 3254 in 1903; 3501 in 1904; 3535 in 1905; 3606 in 1906.

In India cases of yaws are very rare, though small outbreaks of the disease have been described by various observers.

*Australasia.*—The disease is not present in Australia, Tasmania, and New Zealand—while it occurs frequently in many of the Pacific Ocean Islands.

It is extremely common in Fiji, British Guinea, Loyalty Islands, Samoa, New Hebrides, New Caledonia.

*America.*—In the West Indies and French Antilles, yaws is very common. In Cuba some cases occur. It is known in British Guiana, Venezuela, and Brazil. Cases have been occasionally reported from the Southern United States, but never from the Northern States, or from Canada.

*History.*—It has been suggested by some authors (Hume, Adams) that frambæsia is the disease from which the Israelites suffered during their emigration from Egypt, and that the word "saraat" occurring in the thirteenth chapter of Leviticus, really means frambæsia rather than leprosy, as usually translated.

In the works of Avicenna and Ali Abbas of the tenth century there is mentioned a disease called *safat* or *sahafati* with symptoms somewhat similar to frambæsia; most authors, however, are of opinion that the disease referred to by the two Arabian physicians was syphilis.

The study of the disease first began to engage the attention of European physicians after the discovery of America. Ovedio y Valdez (1478-1557) describes the malady in his work "La Genera y Natural Historia de las Indies." Pison (1648) refers to the disease in his work "De Medicina Brasiliensi," Rochefort (1656), Raymond Breton (1665), and Labat (1694) relate in their publications that the inhabitants of the West Indies (Caribs) frequently suffered from a peculiar disease called by the natives *pyans* or *yaya*.

Bontius in 1718 proved that frambœsia was endemic not only in the West Indies of Africa, but also in Java, Sumatra, and other Dutch colonies of the East, where the disease was known under the name of "anboyna pox or pimple."

In the slave-trading days outbreaks of yaws frequently occurred on the crowded ships carrying African slaves to America; special hospitals for the isolation and treatment of slaves suffering from yaws were built on all the important estates in the West Indies. Occasionally in the countries in which it is endemic the disease has spread in such a way as to give rise to true epidemics; an example of such an epidemic occurred in Dominica in 1871, when two special segregation hospitals had to be built for yaws patients.

In 1694 an outbreak of a peculiar disease occurred in Scotland called sibbens or sivvens (*sivvi*, Celtic for raspberry) imported apparently by Cromwell's soldiers; it is believed to have been yaws by some authorities, while others consider it to have been syphilis.

The so-called *button scurvy* of Ireland, endemic there in the eighteenth century and in the beginning of the nineteenth century; the "radesyge" which appeared in Sweden and Norway in 1710, when it was imported into Finland; the "mal de Chicot" in Canada have been considered by some writers to have been forms of yaws.

Attempts have been made by several authors, among the moderns, Breda, to distinguish between yaws, parangi, pian, and boubas; those, however, who have had the opportunity of studying the disease in different countries have all come to the conclusion that yaws, pian, parangi, and boubas are simply synonyms referring to the same malady, viz., frambœsia.

Since the time of Labat there have always been a few writers who have believed that frambœsia is a form of syphilis; this theory has been supported by so high an authority as J. Hutchinson.

In modern times the disease has been investigated clinically and experimentally by a large number of observers.

Of great importance were the researches, carried out in 1882 by Charlouis, who experimentally proved that syphilis and yaws are two different diseases; the clinical investigation of the disease by Numa Rat also was most complete; his report on the malady, written in 1891, has become classical.

Among the more recent observers who have investigated yaws in various parts of the Tropics are Manson, Neisser, Daniels, Janselme, Powell, Branch, Martin, Halberstadter, Von Prowazek, and many others.

*Symptoms.*—For convenience's sake the course of the disease may be divided into three periods:

1. A primary stage comprising the development of the primary lesion.

2. A secondary stage during which the characteristic frambœtic granulomatous eruption appears.

3. A tertiary stage in which the late manifestations of the disease develop: deep ulcerations, gummatous-like nodes, etc.

This division into three periods is somewhat arbitrary, as tertiary symptoms may appear during the secondary stage.

It is often stated that the whole course of the disease varies between three to six months in children, and six to twelve in adults; in my experience, however, the duration of the malady is often much longer, and, when the infection does not become extinct after the secondary stage, may extend to many years. In fact I believe that in a certain number of cases,—although there are periods during which the organism is apparently free from symptoms, the infection is simply dormant and sooner or later gives rise to renewed attacks.

*The primary lesion.*—After an inoculation period varying in length between two to four weeks, characterized often by signs of malaise, rheumatoid pains, headache, irregular rises of temperature, a primary sore appears at the seat of inoculation, which is generally extragenital. The primary sore is a papule which after about a week becomes moist, developing a yellowish secretion which dries into a crust; often at the place of inoculation several papules appear which become moist and fuse together into a single element covered by a thick crust. If after some days the crust is removed the primary sore will appear as an ulcer,—not rarely of rather large dimensions,—with clean-cut edges and a granulating fundus.

This ulcer may heal, leaving a whitish scar,—or in other cases it may develop into a granulomatous mass, not dissimilar to the granulomata of the secondary eruption which appear later on, but frequently much larger. This large single projecting nodule is called “mother yaw” or “maman pian” in French patois. Occasionally round it, before the general eruption begins, several smaller granulomata develop like satellites. The primary sore is often painful during the first stage of development; later it may be quite painless; occasionally there may be pruritus.

The proximal lymphatic glands may become enlarged and hard, but do not come to suppuration.



The seat of the primary sore is generally extragenital. It often develops on an old ulceration, an itch pustule, an itch bite, a wound, a vaccination mark; the smallest erosion is sufficient for the entrance of the virus.

Most of my female patients had the primary sore on one of the mammæ, developing on some crack or abrasion of the nipple and areola. In several other women the primary lesion was found on the skin of the trunk, just above the hip, this being due to the custom the Ceylon women have of carrying their child astride of the hip; any yaws element present on the scrotum or nates of the child will therefore be continually rubbed against the skin of the mother, and infection will take place through any slight abrasion already present, or that may be caused by the friction.

In men and children the primary sore is often found on the arms, hands, and legs, but it may develop on any region of the body. The primary sore may heal before the general eruption begins,—but as a rule is still present when the secondary eruption appears. I had a case in which the primary sore was still present six months after its first appearance, and when the secondary eruption had nearly undergone complete involution. The duration of the primary sore, therefore, may vary between a few weeks and several months. The primary sore leaves a whitish scar which later on may become pigmented; in some cases the scar is small and smooth, in others it is large and very thick. It is to be noted, however, that in Ceylon the disfiguring scar so often found is partly due to the custom the natives have of cauterizing the sore, energetically and with very primitive methods; in other cases the large disfiguring cicatrix is due to the primary sore having developed on an old ulcer which in healing leaves a coarse scar.

*The secondary stage.*—The general eruption usually begins between one and three months after the first appearance of the primary sore. Before the general eruption appears the patient often complains of malaise, headache, severe pains in the muscles, joints, bones. In some cases fever is present of an intermittent or remittent type; the patients, however, are ordinarily able to attend to their work.

The general eruption develops, in my experience, as follows: Minute roundish papules the size of pinheads appear on various parts of the body; some papules soon show a yellow point or minute yellow crust at their apex. Most of the papules remain of practically the same size for many weeks and disappear, leaving occasion-

ally some furfuraceous patches; others become larger, several often coalescing, and frequently acquiring a dark areola in natives, a reddish one in Europeans. Some of the larger papules increase in size, and develop into large granulomatous-looking nodules, covered with a crust, honey-yellow or brownish, formed of dessicated secretion. If the crust covering the granulomata be removed there will be seen a raw surface throwing up coarse red or yellowish fungoid granulations secreting a thin, slightly purulent secretion, which soon dries into a crust again. These yaws granulomata are of various size, and may be found on practically any part of the body; they are extremely common on the upper and lower limbs, and on the face; on the scalp they are very rare; they may form rings round the mouth or anus and may enclose sound skin. They may remain of the same size and appearance for months; often after a few weeks the secretion diminishes, and a process of hyperkeratosis sets in; they become of much harder consistency, and some of them, especially those of the feet, may be covered with numerous hard, verrucose-like, small protuberances. In the majority of cases within three to six months in children, and six to twelve months in adults, the yaws dry up, shrink, and disappear, leaving dark, hyperpigmented spots on their site which are very persistent. In some cases the granulomatous eruption is very persistent, lasting for several years, new crops of granulomatous nodules appearing from time to time in succession. Each frambœtic granuloma generally undergoes involution within two to four months, leaving behind a dark area; occasionally, however, the frambœtic granuloma does not involute so soon. I have among my patients a boy of eleven who two years ago had a general eruption of yaws; all the granulomata disappeared excepting one on the right knee, which is still present.

The granulomata are seldom painful unless when developing between the toes, on the soles of the feet, or round the nails; they often cause itching.

Patients affected with yaws often exhale a peculiar offensive odor which has been variously described as sour or musty; this is probably due to the growth of various bacteria representing secondary infections, under the crust of the granulomata; I have more especially noticed this offensive odor when the secondary infection is due to bacilli of Vincent's type, and coarse spirochætes. In such cases if the sores are well washed with perchloride solution for two or three days, the bacilli of Vincent's type and coarse spirochætes disappear and the smell is no longer noticeable, though the granulomata do not undergo any change.

Though the framboetic granuloma is the characteristic eruption of the secondary stage, there are during this stage eruptions of different types, papular, scaly, and ulcerative.

An average ordinary case will present at the same time several typical yaws granulomata, numerous small reddish papules with the epidermis intact, other papules which have become moist and are covered by a tiny yellow crust; several furfuraceous patches here and there, and spots of increased pigmentation at the place of previous granulomata. Occasionally some granulomata break down and large irregular ulcers showing in their center and reddish papillomatous masses develop which in my experience do not usually heal spontaneously.

At times in the later period of the secondary stage peculiar, roundish, or irregularly outlined whitish patches are present, especially on the back and arms, with a nutmeg-grater like surface; on closer observation these patches are seen to consist of numerous hard, conical papules, containing in their center an epidermic plug, which is easily removed, leaving a depression in the papule; sometimes the plugs are spiny, and in this case the eruption closely resembles lichen spinulosus.

*Eruptions on the palms and soles.*—The granulomatous eruption very often attacks the soles of the feet; at first dark-brownish or livid intense spots, very painful, appear; their thick epidermis is gradually broken away and is pierced by framboesial nodules similar to those found on the other regions of the body. This framboetic affection of the soles is very painful, and is called by natives of Ceylon “dumas.”

The same lesions, but generally not so severe, may be found on the hands. The granulomatous infiltration may attack the matrix and margins of the nails (framboetic onychia and paronychia). The nails become thickened, dry, brittle, and may be cast off entirely, though later they grow again.

After the granulomata have disappeared—occasionally at the same time—peeling whitish patches may be found on the palms and soles of the feet, closely resembling the syphilitic psoriasis palmaris, et plantaris.

*Peculiar pitted appearance of the palms.*—In several cases, in the latter part of the secondary stage, I have observed on the palms and wrists hard, roundish, flattened papules or small nodules, having a thick, hard, epidermic plug in their center; this plug falls off spontaneously or is easily pulled out; a deep depression remains,—



the papules gradually disappear, but the depressions remain and the palms take on a peculiar pitted appearance.

This condition of the palms may remain unchanged for several years after every symptom of frambæsia has disappeared. A somewhat similar appearance of the soles of the feet is occasionally met with.

*Lesions of the hair and nails.*—I have never noticed any change in the appearance of the hair, nor alopecia. A few hair follicles may be destroyed when the granulomata develop on the scalp; which, however, very seldom happens.

*Mucous lesions.*—These are not very common; during the secondary stage small granulomatous nodules may develop at the base of the tongue, also whitish patches closely resembling syphilitic leukoplakia. Small granulomata may develop on the nasal mucosa.

*Constitutional symptoms. Fever.*—As already stated, fever is frequently present, of intermittent or remittent type, before the general secondary eruption begins. During the secondary stage proper fever is absent unless complications supervene.

*Lymphatic glands.*—In a number of cases various groups of lymphatic glands are found to be enlarged. The enlarged glands are roundish or spindle-shaped, hard, painless, and never come to suppuration unless a secondary pyogenic infection be present; the cervical and inguinal glands are those most frequently enlarged.

*Alimentary system.*—As a rule the digestive functions are not disturbed. In children slight diarrhea may be occasionally noticed preceding the general eruption. The spleen and liver are very often found enlarged in children, but this is probably due to progressed or concomitant malaria infection. The microscopical examination of the feces of yaws patients will often reveal ova of various worms; ascaris lumbricoides, trichocephalus dispar, and occasionally anchylostoma duodenalis; but this is of frequent occurrence also in normal natives.

*Respiratory system.*—The small granulomatous ulcers occasionally met with in the nasal mucosa have already been mentioned; similar ulcerations are to be found, though very rarely, in the larynx. As a rule the respiratory, as well as the circulatory, system is not affected.

*Locomotory system. Joints.*—Arthritis pseudo-rheumatism.—In some yaws patients several of the large articulations may become swollen and very painful. The condition is often of an acute character and may be accompanied by fever, so that an attack of ar-



ticular rheumatism supervening on the frambætic infection might be suspected. Sodium salicylate, however, is not beneficial, while the administration of large doses of potassium iodide speedily reduces the temperature to normal, and causes the swelling of the articulations to disappear. At other times one articulation only is involved and the symptoms may become so serious as to suggest purulent arthritis—as shown by the following case:

Podyhanny, female, æt. forty, was admitted to the clinic on December 9, 1906, showing a typical general eruption of yaws. After a week, during which time no specific treatment was given, she began to complain of malaise, vague muscular pains, and severe pain in the left knee and in the right shoulder, the temperature rising to 101. Salicylate of sodium was given in large doses. The following day the pain in the shoulder and the muscular pains had disappeared, and there was no fever in the morning, but at night the temperature rose to 103; the knee was very painful and there were clear signs of effusion. During the next few days the condition became worse, the fever ranging between 99 to 100 in the morning, and 103 to 104.2 at night. The patient often had shivering in the morning, while at night she perspired profusely. Examination of the blood for malaria negative; well marked leucocytosis (22,000 leucocytes per cmm.) present. Spleen not palpable. The knee became greatly swollen and extremely painful, the skin very tense; no movement of the articulation was possible. On the sixth day I tapped the articulation with a sterile syringe expecting to find pus, but only clear fluid was drawn. Large doses of potass. iodid. were then given, and all the symptoms disappeared in four or five days.

In many cases the smaller articulations become involved; the symptoms in such cases are not acute and there is usually no fever.

*Bones.*—Inflammation of the periosteum of various bones is of common occurrence. Very frequent is a form of multiple periostosis of the digital phalanges, the cause of the “multiple dactylitis” so often seen in yaws patients.

*Muscles.*—Contractures of various groups of muscles may be observed; fairly common is a contracture of the flexor muscles of the forearm; this contracture is often permanent, and in my opinion, is probably due to pathological alteration of the peripheral nerves, rather than of direct muscular origin.

*Nervous system. Neuritis.*—Neuralgic pains are often observed; but also a true form of neuritis must be admitted; I have seen in several cases clear symptoms of neuritis of the sciatic nerve,

with severe pain along the course of the nerves and signs of motor and trophic disturbances.

*Hyperidrosis.*—In several of my patients I have noticed hyperidrosis. The phenomenon was limited to the face in some cases, to the hands and soles of the feet in others; it never extended to the whole body, and always affected symmetrical regions. Hyperidrosis is more frequently observed in children than in adults. In one case—a boy of fourteen—presenting a general eruption of yaws, the hyperidrosis of the face was so marked that large drops of perspiration were continually dropping down. I treated him with potassium iodide; after a month the yaws granulomata had disappeared and the hyperidrosis was no longer noticeable. In some cases the hyperidrosis ceases suddenly without treatment; the condition may last, however, for some weeks or months.

*Cerebro-spinal fluid.*—In the three cases of typical yaws I have performed lumbar puncture, collecting in each case about 22cc. of fluid. The liquid was in all cases perfectly clear, like distilled water. The pressure was not increased. The physical and chemical characters were alike in all cases and apparently did not show much variation from what is found in normal condition. The density varied between 1.003 and 1.005.

A certain amount of globulin was present and a substance (dextrose?) reducing Fehling's liquid. This reducing substance was in two cases, distinctly in excess of what is observed in the normal fluid. No cholin was found. The reaction of the fluid was alkaline. In two cases the centrifuged liquid examined microscopically, did not contain any cellular elements: in the third case a few, extremely rare mononuclear cells were found. The liquid was sterile, no spirochætes could be detected.

*The eyes.*—Granulomatous and papular eruptions may develop on the eyelids. A slight periostitis of the orbital margin is not rare, the margin becoming thickened and very painful on pressure. The occurrence of iritis is denied by most authors. I have seen two typical cases occurring during the general granulomatous eruption; in both cases the affection was of moderate severity; there was photophobia, ciliary congestion, discoloration of the iris; pupillary reaction was almost absent. Both cases recovered on large doses of potassium iodide without any local treatment.

*The Genito-Urinary System.*—The primary lesion is rarely found on the genital organs; in fact in all the cases I have seen, which amount to several hundred, the primary lesion was always

extragenital. Eruptions of the secondary stage, papular and granulomatous, frequently involve the skin of the penis and of the labia; granulomatous ulcerations may be found on the vaginal mucosa.

The urine, as a rule, does not contain anything abnormal; only when there is fever, as, for instance, when the articulations are acutely involved—then a slight amount of albumin may be present.

*The blood.*—In all my cases in which the blood was examined a certain degree of anæmia, never very severe, was present. The number of red blood corpuscles varied from 3,000,000 to 4,000,000; the hæmoglobin index (Fleischl) from 50 to 75. The red blood corpuscles did not show anything abnormal in their shape. On several occasions I noticed a comparatively large number of polychromatic erythrocytes staining blue instead of pink with Leishman's method. Many of these basophile red cells are microerythrocytes.

The leucocytes varied from 7,000 to 11,000 per cmm. In the majority of cases an increase was noticeable in the number of the large mononuclears, even when there was no sign and no history of malaria. In almost all the cases the eosinophiles were increased, this being possibly due—in part at least—to the presence of intestinal worms, as revealed by the microscopic examination of the stools, which showed frequently ova of *ascaris lumbricoides*, *trichocephalus dispar*, and in a few instances of *ankylostoma duodenalis*.

**TERTIARY STAGE.**—The disease often terminates with the secondary stage; in some cases, however, the infection does not become extinct, and tertiary lesions appear. Sometimes the secondary and tertiary stages merge into each other, but frequently the tertiary symptoms appear after the lesions of the secondary stage have undergone complete involution. The interval of time varies considerably in length and may extend to many years.

The characteristic lesions of the tertiary period are gummatous-like nodules and deep ulcerative processes. These gummatous nodules may develop in any tissues. When developing in the skin and subcutaneous tissues they are indolent and by their softening and breaking down ulcers are produced which may present clear-cut margins and a granulating fundus; when several contiguous nodules break down, serpiginous ulcers are left. In other cases deep irregular-shaped ulcerations, with very thick and undermined edges, are seen; in others large fungative ulcers are present. On healing, these various ulcers leave whitish scars which, when unbroken, run



a very chronic course, and when healing leave often very thick and disfiguring scars which often undergo retraction, and cause thereby permanent contractures and disfigurements.

Lesions of the osseous type are very frequent; painful nodes developing under the periosteum of several bones; ribs, sternum, etc. In other cases a diffuse chronic periostitis is present, altering the normal shape of the bones. Contractures of various groups of muscles are frequently seen.

Tertiary affections of the internal organs and of the central nervous system have not yet been described; I believe that future investigation will prove that they do occur in some cases. It is also probable that further research will show that frambœsia may be hereditary—though it is worth noting that, in contrast to syphilis, parents generally contract the malady from their children.

*Cases illustrating the occurrence of tertiary symptoms in yaws—*  
As several of the modern authors deny the occurrence of tertiary symptoms, I may quote a few of my cases clearly showing the existence of such lesions:

CASE 1. Young Singhalese girl of about fourteen years of age. No history of syphilis, either congenital or contracted; she is a strong-looking girl, her teeth, eyes, and ears normal; her genital organs are intact; five years ago suffered, together with all the other members of her family, from yaws, and was treated in a Government hospital, from which she was discharged cured a few months later. She remained in good health till four months ago, when she noticed a slight indolent swelling on her right leg. The swelling increased in size and finally broke down, leaving a rather large ulceration. Two months later, when I examined her, several ulcers were present on both legs, of irregular shape, thick margins, rather deep, and without much secretion; the left tibia was arching forward; moreover, on one of the ribs an indolent gummatous-like swelling was present. In the secretion of the ulcers no spirochætes were found. The girl has been treated with potassium iodide, and the ulcers have healed leaving large whitish irregular scars (see Fig. 12).

CASE 2. Singhalese girl of about eleven years of age, sister of the previous patient. No history of syphilis; genital organs intact. Five years ago suffered from yaws at the same time as her sister. She recovered and remained in good health till three months ago, when an ulcerative process developed on the soft palate which, at



the time I examined her, had already destroyed the uvula. The patient presented thickenings of the metacarpal bones and phalanges which had caused a certain distortion in the right hand. The potassium iodide treatment was begun some months ago, and the patient is rapidly improving, the ulcerative process of the palate being already arrested and healed. No spirochætes were found in the ulcer.

CASE 3. Singhalese boy nine years old; strongly built, with no signs of hereditary or contracted syphilis; was treated by me for a general eruption of yaws in June and July, 1905. The boy is living near the clinic, and it has been very easy, therefore, to keep him under observation. After having been discharged at the end of July, 1905, he was well for eight months; only the dark spots at the site of the granulomata and a scurfy condition of the skin of the back could be seen. In March, 1906, he suffered from a mild form of "Dumas," a few small granulomatous nodules being present on the left foot. This condition disappeared in a few weeks under the action of large doses of potassium iodide; and the boy remained in good health till May of this year (1907), when several gummatous-like nodules developed on both legs; the nodules broke down, leaving serpiginous ulcers. At the same time a painful node appeared on the left clavicle. Large doses of potassium iodide were again given, with the result that the ulcers have healed, leaving whitish scars, and the node on the clavicle has become absorbed.

*Pathology.*—The histo-pathology of the disease has been thoroughly investigated by Unna, Jeanselme, Macleod, and Plehn. I have come to the same conclusions. The typical lesions of yaws must be considered to be granulomata. There is a very diffuse plasma-cell infiltration, the plasma-cells retaining their original type better than in any other granulomata. The proliferative changes are very well marked; the papillæ are much elongated, their blood vessels being dilated but rarely thickened.

When the yaws have reached a certain stage a very-well marked hyperkeratosis is noticeable. I would call attention to the appearance of the films, taken in the usual way from yaws granulomata and stained according to Leishman's method. In such films it is interesting to note the presence of a large number of polychromatic red blood cells of very different size; some much larger than the normal erythrocytes—some much smaller. They are stained deep or light blue instead of pink, and sometimes have a granular appearance. The leucocyte present in the films frequently contain in

their protoplasm, and sometimes in their nuclei, roundish or oval, more or less deeply stained bodies, which I believe to be probably polychromatic micro-erythrocytes engulfed by phagocytes.

*Etiology. Historical.*—Various bacteria have been described in yaws; Eijkman found some peculiar bacilli; Pariez observed numerous micrococci; Powell, in 1896, cultivated in two cases a yeast which was present in the granuloma and also between the epithelial cells. Breda in several cases found a bacillus which he named the “*Frambæsia bacillus*.”

Nicholls and Watts, in 1899, found in the granulomata a coccus, which they cultivated in pure cultures. The same coccus was found once in the lymphatic glands. Inoculations into animals did not succeed.

In February, 1905, an extremely delicate, almost invisible spirochæta, or spirillus, as I thought at that time, was observed by me in a case of yaws. Schaudinn's discovery of a spirochætes in syphilis, published soon after, induced me to work at the subject in a systematic manner. A preliminary note on the presence of spirochætes in yaws was published by me on June 17, 1905, in the *Journal of the Ceylon Branch of the British Medical Association*; another communication was made by me at the meeting of the British Medical Association, Leicester, July, 1905. Several more cases of yaws showing spirochætes I described in the *British Medical Journal* of November 18 and 24, 1905; at that time I had 11 positive cases out of 14. My results were confirmed by Wellman in one case (*Journal of Tropical Medicine*, December 1, 1905), and by Powell in another (*British Medical Journal*, December, 1905). Further researches of mine appeared in the *Journal of Tropical Medicine*, January 1, 1906, and *Deutsch. med. Woch.*, No. 3, January, 1906. Recent publications by various authors confirm the presence of spirochætes in yaws; among these publications one of the most important is by Borne, who has found spirochætes in 9 cases out of 11. (*Geneeskundig Tijdschrift*, 1906). Recently Borne as informed me by letter that he has been able to detect spirochætes in 49 cases out of 52. Halberstaedter has very recently confirmed the presence of the spirochæte in human yaws as well as in monkeys inoculated with the disease.

#### SPIROCHÆTE PERTENUIS (CASTELLANI). JUNE, 1905<sup>1</sup>

The spirochæte pertenuis is an extremely delicate, motile, spiral-

<sup>1</sup> In the *British Medical Journal* of November 26, 1905, I suggested the name *spirochæte pallidula* for the yaws spirochæte on account of its resemblance to the

shaped organism; its length varies from a few microns to 18 and 20 microns and even more. It is extremely thin; some individuals are, however, thicker than others. The yaws spirochæte is stained with difficulty. Good results are obtained by Leishman's method provided the alcoholic solution is allowed to act for five minutes and the subsequent admixture with distilled water for from one-half hour to several hours. Giemsa's stain also gives good results. Using either of these methods the spirochæte stains purplish; occasionally a few chromatoid points may be seen in the body of the organism.

The extremities of the organism are often pointed, but, due, possibly, to the manipulation of the films, forms may be met with, presenting blunt extremities, or one extremely blunt and the other pointed.

In a few individuals one of the extremities may present a rather large pear-shaped expansion, or a loop-like formation. The number of waves varies (6 to 20 and more), but they are generally rather numerous, uniform, and of small dimensions. Occasionally a portion of the spirochæte shows numerous narrow uniform waves, while the rest of it has no waves at all. Sometime two spirochætes may be attached together, or apparently twisted one on the other.

As regards the minute histological structure I have not so far been able to detect an undulating membrane, though the presence of such an undulating membrane has been admitted by other observers (Blanchard). Occasionally in preparations stained by Löffler's method of flagella staining, it has seemed to me that some of the organisms present an extremely delicate flagellum at one end. According to my results, therefore, the organism should be considered a *treponema* rather than a spirochæte. Further investigation, however, is necessary to settle this point.

From the description I have given it will be seen that the yaws organism show morphologically resemblance to the organism of syphilis. In fact I was for a long time of the opinion that the two germs differ biologically rather than morphologically. According to Blanchard, Mesnil, and others, however, slight morphological differences can be made out. Martin in a recent very interesting publication in the *Deutsch. med. Woch.*, states that the yaws spirochæte is even more delicate and more difficult to stain than the *spirochæte*

spirochæte found in syphilis; according, however, to the laws of nomenclature, the correct zoological name is *spirochæte pertenuis*, which form I had used some months before. (*Journal of the Ceylon Branch of the British Medical Association*, June 17, 1905.)



*pallida* of Schaudinn. Rivas states that the spirochæte *pertenuis* is thinner than the spirochæte *pallida*, and has narrower waves. In non-ulcerated lesions the *S. pertenuis* is the only germ present.

*Bacteriological flora found in open sores of frambæsia.*—While in the non-ulcerated lesions the *S. pertenuis* is the only germ found, the ulcerated lesions of frambæsia are invaded very quickly by all sorts of germs. Besides innumerable bacteria, often spirochætes of various kinds are present, one form is rather thick, and takes up the stain easily; it is morphologically identical with the *spirochæte refringens* of Schaudinn. Another form is thin, delicate, with waves varying in size and number, and with blunt extremities; I proposed for this variety the name of *spirochæte obtusi*. A third form is also thin and delicate, but is tapering at both ends; I named it *spirochæte acuminata*. The *spirochæte pertenuis*, as found in non-ulcerated lesions, may also be present.

#### INOCULATION EXPERIMENTS OF YAWS IN MAN

Paulet (1848) inoculated fourteen negroes with the secretion taken from yaws granulomata. All of them developed yaws, the inoculation period varying from twelve to twenty days, when at the place of inoculation, in ten cases the first nodule of yaws appeared, soon followed by a typical general eruption. In two cases apparently the eruption did not start from the seat of inoculation.

The investigation of Charlouis (1881) is most important. He inoculated thirty-two Chinese prisoners—who had never suffered from the disease—with crusts and scrapings of a yaws case. In twenty-eight cases the disease developed, beginning always from the seat of inoculation.

Moreover Charlouis inoculated a native, suffering from typical yaws, with syphilis. The inoculation was quite successful, a primary syphilitic sore developing followed by all the usual types of secondary eruption. That yaws patients are not immune against syphilis is proved also by Powell, who described two very interesting cases of syphilis supervening on yaws.

#### PERSONAL EXPERIMENTAL INVESTIGATIONS

*Inoculation of yaws in monkeys.*—My first experiments, made at the beginning of 1905, on a "purple-faced monkey" (*Semnopithecus cephalopterus*) were negative. In February and March of 1906 I made some more experiments of inoculation on three monkeys



of the genus *macacus*, with positive results in one case. The monkey which was successfully inoculated with yaws was later successfully inoculated with syphilis.

In the meantime Neisser, Baermann, and Halberstadter published in the *Münch. med. Woch.* (November 28, 1906), a complete report on their results on the inoculation of yaws in monkeys, coming to the conclusion that monkeys of a high, as well as of a low type are susceptible to be infected with yaws; and that monkeys immunized for syphilis do not become immune for yaws.

I have continued the investigation on numerous monkeys of the genus *macacus* and *semnopithecus*. In both genera the positive results are fairly numerous provided the scarifications on which the yaws material is inoculated are made as deep as possible. I quote two of the experiments which gave positive results.

Monkey No. 4 (*Macacus pileatus*), November 10, 1906. The scrapings taken from a non-ulcerated yaws papule is rubbed thoroughly into the scarified spots over the left eyebrow. The slight local inflammatory artefacts caused by the scarification subsided in three days. Nineteen days after the inoculation a very small flattened papule surrounded by an infiltrated zone appeared at the seat of inoculation. The lesion soon became enlarged and moist, the secretion drying into a thick crust. On removing this crust a granulating raw surface was seen. Two months later the first element being still present, four more papules appeared, two on the lower part of the forehead close to the primary lesion, and two just over the upper lip. One of these elements disappeared after a few days; the others became moist and a yellowish crust formed on each of them. These papules remained always small and disappeared within three months, leaving tiny dark marks. The eruption was evidently very itching, as the monkey was continually scratching. It is possible that the papules observed two months after the first lesion appeared may represent facts of auto-inoculation by scratching rather than representing a true secondary eruption.

Monkey No. 17 (*Semnopithecus priamus*), October 15, 1906. Scrapings taken from a non-ulcerated papule of a yaws patient is well rubbed into deep scarifications over the left eyebrow. Forty-five days after, three slightly elevated spots appeared which soon fused together into an infiltrated mass, covered by a thick crust. The lesion is still present and of much larger size. It was examined for the spirochæte *pertenuis* on three different occasions, with posi-

tive results twice. Altogether eight monkeys of the genus *macacus* and eleven of the genus *semnopithecus* have been inoculated by me with scrapings taken from the eruptive elements of yaws patients; the inoculation was successful in five monkeys of the first genus and nine of the second. The incubation period has varied from a minimum of sixteen days to a maximum of ninety-two. The appearance of the lesion developing at the seat of inoculation was practically the same in all cases, viz., an infiltrated spot slowly increasing in size and soon becoming moist, the secretion drying into a thick crust. When the crust was removed a raw, granulating red surface was seen. With the exception of three cases the eruption remained localized at the point of inoculation, and no other eruptive elements appeared. In the three cases in which eruptive elements developed some time after the primary lesion, in one, as I have already mentioned (monkey No. 4), two small papules appeared on the lower part of the forehead in vicinity to the primary lesion, and two others above the upper lip. Of the other two monkeys in one a rather large moist papule appeared on the lower lip three months after the primary sore had developed; in the other three, small papules, which soon broke and became covered with a crust, developed on the lower part of the forehead close to the primary lesion, two and a half months after the first lesion had appeared.

*To be Concluded*

#### DESCRIPTION OF PLATES.

- PLATE XIII—Fig. 1. Primary lesion of Framboesia on the thumb. General eruption on the face.  
 Fig. 2. Primary lesion under the nipple.
- PLATE XIV—Fig. 3. Showing how Ceylon women carry their children.  
 Fig. 4. Framboesia, general eruption.
- PLATE XV—Figs. 5 and 6. Framboesia, general eruption.
- PLATE XVI—Fig. 7. Framboesia, general eruption.  
 Fig. 8. Palmar eruption, showing peculiar pitting.
- PLATE XVII—Fig. 9. Framboesia, general eruption.  
 Fig. 10. Framboesia. Eruption of the soles of the feet, which is called "Dumas" by the natives of Ceylon.
- PLATE XVIII—Fig. 11. Framboesia, tertiary eruption on heel. Note pitting of skin.  
 Fig. 12. Framboesia, tertiary lesions of legs.
- PLATE XIX—Fig. 13. Spirochaete Pertenuis.  
 Fig. 14. Experimental Framboesia. Initial lesion on left eyebrow. General eruption on upper lip.



FIG. 1.



FIG. 2.







FIG. 4.



FIG. 3.





FIG. 6.



FIG. 5.







FIG. 7.



FIG. 8.





Fig. 10.



Fig. 9.







FIG. 11.



FIG. 12.



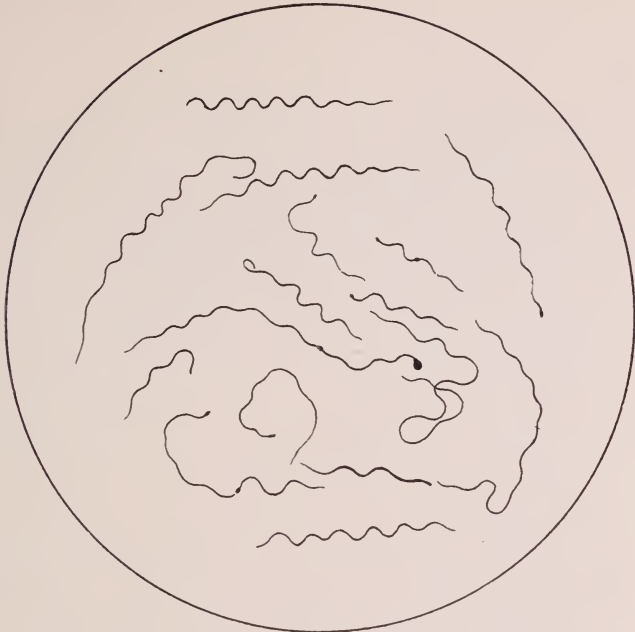


FIG. 13.



FIG. 14.





## ZITTMANN'S DECOCTION.

By DOUGLASS W. MONTGOMERY, M. D., Professor of Diseases of the Skin, University of California.

Read before the Society of German Physicians, January, 1908.

IT is often concluded that because a drug has certain chemical properties it must necessarily be of value in a given disease. This mode of reasoning is apt to lead into error. It is also erroneous to assert that because a medicament does not answer to certain chemical requirements it must necessarily be valueless, for it is not a drug's composition but its actual results on a disease that are its final test. Let us take as an illustration of our view a decoction that at one time enjoyed a great and deserved popularity in the treatment of syphilis. It fell into disuse, largely because the chemistry of the day asserted that the mercury used in compounding it was insoluble, and therefore could never reach the patient. Now, through chemistry, it is known that mercury is present in the finished decoction, and in a very digestible form.

The name of the preparation in question is Zittmann's decoction, and a remarkable feature of it is, that at first sight not one of the drugs employed in its composition appears to be capable, in the form in which it is used, of exerting the least influence on the disease for which it is prescribed.

The old way of making this preparation is as follows:

R—

Sarsaparilla root . . . . .	100.00
Water . . . . .	2600.00

Then add well mixed up and in a linen bag

White sugar	
Powdered alum, ā ā . . . . .	6.00
Calomel . . . . .	4.00
Cinnabar . . . . .	1.00

Allow to stand over night in a covered porcelain or earthenware vessel. The next morning simmer gently for eight hours. Then add:

Fennel seed	
Anise seed, ā ā . . . . .	4.00
Senna leaves . . . . .	24.00
Licorice root . . . . .	12.00

The seed should be first brayed in a mortar and the leaves should be cut fine.

Allow the mixture to stand for three hours and then strain off 2500 grams.

This should be labelled Zittmann's Decoction (strong).

The weak decoction is made as follows:

Take the dregs left after straining off the strong decoction, and add to them

Sarsaparilla root . . . . .	50.00
Water . . . . .	2600.00

Boil gently as before for three hours, stirring frequently, and add:

Lemon peel	
Cassia bark	
Licorice root	
Short cardamon seeds . . . . . ā ā	3.00

Allow to stand for three hours and strain off 2500 grams.

Bottle and label Zittmann's Decoction (weak).

The dose of the decoction varies. A wine glassful each of the strong and of the weak is a moderate dose. If it proves too laxative, less may be given. Sometimes large doses are ordered, as a pint of the strong in the morning and a pint of the weak at night, but this is unusual. If the patient is kept in bed, and the decoction is taken warm it undoubtedly adds to its efficacy.

The principle drugs of this preparation are sarsaparilla, senna, and two forms of mercury, calomel and cinnabar.

Sarsaparilla is a soapy plant containing from one to three per cent. of saponin, a small quantity of digitonin, perillin, some starch, and a bitter acrid resin. The soapy, slippery decoction made from this plant has long enjoyed a great reputation as a slowly-acting alterative on sluggishly advancing diseases such as late constitutional syphilis and leprosy. The saponins not only promote excretion through the intestinal canal, but through most other channels as well, and the digitonin, which is a cardiac depressant closely allied to saponin, probably aids in this depurative effect.

Senna is another of the chief drugs in this decoction, and although it is not an antiluetic remedy, yet it is often a most useful drug in syphilis. Years ago I came to the conclusion, as many physicians before me had, that elimination is of infinite value in the treatment of syphilis. Mercury itself is a most active eliminative, as no drug will so quicken the saps of the body, nor hustle out impurities faster. If, however, the mercury introduced into the body lags in its course or in its exit, as it may readily do in many elderly and in some young people, then the addition of senna may furnish just the necessary acceleration.

In the making of Zittmann's decoction, a small quantity each of alum, calomel, cinnabar, and sugar are tied up in a linen bag, and are thrown into the pot with the other ingredients, which are then boiled slowly and for a long time. As calomel and cinnabar are mercurials, and as mercury is the most effective agent in the treatment of syphilis, this is the only part of the prescription that would seem to be written with a serious intention. According to our usual notions of chemistry, however, it is difficult to see how either the calomel or the cinnabar could reach the patient, as they are both insoluble, and are tied up in a linen bag, and are retained in the dregs after straining off the decoctions. Furthermore, by the ordinary tests, no mercury can be shown to be present in the finished decoction. Arguments based on these facts were of such weight both with pharmacists and physicians that all mercurials are left out of Zittmann's decoction as ordered in the German Pharmacopeia, and with us also, the compound decoction of sarsaparilla contains no mercury.

I shall here take the opportunity to relate an incident that occurred at a meeting of the International Dermatological Congress held recently in New York.

Doctor Viel of Canstatt had occasion, during some phase of a discussion on the treatment of syphilis, to refer to the use of Zittmann's decoction. On afterwards meeting the Doctor I thanked him for having praised an old friend. He inquired, "Whom?" I said, "Zittmann's decoction." "Yes, yes," he said eagerly, "that is an admirable though much neglected remedy, and care should be exercised to have it prepared in the old way and with mercury." He then went on to tell me that recently through electrolysis mercury had been demonstrated as present in Zittmann's decoction, and in a very easily digestible form, as the albuminate. The long slow boiling changes some of the calomel and cinnabar into the albuminate, and it may be that the saponin of the sarsaparilla aids in the transition. It is most interesting to find that in the course of time,

even from a chemical point of view, the observations of the old clinicians have been justified.

We have therefore in this preparation senna that acts on the intestinal glands as a laxative, sarsaparilla that acts as an accelerator of exchange on many glands and tissues of the body, notably on the skin. This action on the skin is shown by increased perspiration, and this effect is heightened by keeping the patient in bed, and giving the decoction warm. A just idea of the value of acceleration of exchange in the body may, we think, be obtained by studying the sinister effects of the slowing down of the nutritive processes as elucidated so ably by Bouchard. In addition to senna and sarsaparilla Zittmann's decoction contains a very easily assimilable form of mercury, and these ingredients probably account for the beneficent effects often observed following the use of this medicament. The rest of the drugs entering into the decoction probably only act as flavors and carminatives to hide the nauseating taste, or to prevent the griping effect of the senna.

It is important to instruct the pharmacist to prepare this decoction according to the old rules. Mercury for instance must not be omitted, and until a better way is actually demonstrated, it should be added as cinnabar and calomel together with alum and sugar in the much ridiculed linen bag. The chemists and pharmacists have already done enough harm in this direction only to find that the stone that the builders rejected has now become the head of the corner. In speaking of the alleged insolubility of calomel and deductions drawn from it in the practice of medicine, Dr. W. S. Franklin recently drew my attention to an interesting observation on the use of calomel powder in phlyctenular keratitis. Calomel has long been used in this disease; and as it is insoluble, some men, chemically inclined, asserted that its sole effect was that of a smooth bland powder. To test this, very finely powdered glass was used instead of calomel, but clinically it was found not to answer. In all probability the secretions of the eye act on the calomel liberating a soluble salt, that acts beneficially on the disease.

The decoction should be made at a simmering heat, as a slow fire is much better than an intense one to extract the principles out of the sarsaparilla. The length of time in boiling must not be shortened, as time must be an important factor in forming the albuminate of mercury from the calomel and the cinnabar.

Alcoholic extracts must not be used in making the decoction, as, for instance, the saponin of sarsaparilla is not soluble in alco-



hol, and its value would therefore be lost in any such procedure. One may give these instructions to a druggist, but the next thing on the program is to get the instructions fulfilled. This is especially difficult if the apothecary is over clever and enterprising. Then the only remedy seems to be to sit over him with a cocked pistol in your hand while the necessary steeping and boiling is being carried out.

It is not contended that this medicament is as powerful an antisypilitic as either mercury or iodid of potash as ordinarily given, but it will undoubtedly often help one out of a very tight place when other remedies fail. In malignant syphilis, for instance, when mercury as ordinarily given fails to control, and when iodid of potash disagrees with the stomach, one is indeed in a dilemma out of which Zittmann's decoction may help one brilliantly. The following is an example:

A young man acquired a sore that ulcerated so freely and so deeply and with so little induration as to be taken by experienced men for a chancroid. In due time a roseolar rash appeared, quickly followed by a deeply ulcerating ecthymatous eruption. From this on for four or five years the disease manifested itself in most persistently malignant ways, in the skin, mucous membranes, and internal organs. He had at one time, dulness over the right apex with extreme emaciation, but without cough or the presence of tubercle bacilli in the sputum. He, at another time, had marked enlargement of the liver with albumen and casts in his urine. He had also most persistent deep mucous patches in his mouth, and he had an orchitis followed by atrophic induration. Throughout his illness the patient was pale, thin, and decrepit looking, and probably lacked power to form sufficient anti-bodies to combat the disease. I, as well as many others, used mercury by inunction, by intramuscular injection, intravenously and by the mouth, and in such dosage as to cause gingivitis and severe abdominal cramps. The lesions under this vigorous treatment would slowly and reluctantly recede, to recur almost immediately when the severe symptoms of mercurialism would subside. Iodid of potash would also slowly drive the symptoms back, but in a short time it would so disagree with the patient's stomach as to compel the cessation of the drug.

It was in an effort to relieve this disastrous state of affairs that a plan of treatment was hit upon that at least gave the patient relief from the torment of his disease, with very little distress from medication. A ten or twenty grain powder of iodonucleoid with

four ounces of the weak and four ounces of the strong Zittmann's decoction after each meal would, in a few days cause a marked change for the better in any luetic symptoms he might have.

Iodonucleoid is an organic combination of iodine probably very similar to the iodid of starch so highly recommended by McCall Anderson.

It is interesting also to note, what has long been known, that mercury and iodid of potash in their usual modes of administration regularly disagree with patients having malignant syphilis. This curious fact has recently been commented upon both by Neisser and by Petrini de Galatz<sup>1</sup>.

Some years ago, in our State Society I remember Dr. Granville MacGowan of Los Angeles presented a case of malignant syphilis where both specifics failed, and where the patient rapidly recovered under the administration of Zittmann's decoction.<sup>2</sup>

Zittmann's decoction may be given also as a mild alternative between courses of inunctions or injections of mercury, or after the prolonged administration of iodid of potash. It is also valuable in relieving those old torpid livers that have been devastated by syphilis, and bombarded by all the inventions known to the cleverest of bartenders. Zittmann's decoction, well made and judiciously taken, will often get an unexpected amount of good work out of those old hepatic and intestinal glands, and will often enable the patient to enjoy many a good cocktail and a corresponding number of fine stories.

In closing I wish again to say a few words on chemistry and of its influence on the practice of medicine. That chemistry has done infinite good to the practice of medicine there can be no doubt, and furthermore the hope for future advance lies largely along chemical lines. What is objected to is subserviency to chemistry, and often to men who never saw a patient. It is difficult and discriminating work to try to determine if a given medicament is doing good to a patient, but that is what a physician is for, and that is why the practice of medicine is an art and not a science.

<sup>1</sup> *Note sur un cas de tertiarisme précoce* par M. le Prof. Petrini de Galatz, *Ann. d. Mal. Vén.*, Dec. 1907.

<sup>2</sup> A case of Malignant Syphilis Cured by Zittmann's Decoction, Granville MacGowan, M. D., *Journal of Cutaneous and Genito-Urinary Diseases*, March, 1901.

## SOME REMARKS ON THE PROVISIONAL NOMENCLATURE OF THE AMERICAN DERMATOLOGICAL ASSOCIATION.

By ACHILLES ROSE, M D., New York City.

**B**Y request of one of the members of the American Dermatological Association, I have read the "Provisional Nomenclature" of this Association with a view to making suggestions. I find that most of the terms printed on a list given to me are perfectly correct, that a few are hybrid, or corrupt, or grammatically incorrect, and I wish to point out the deficiencies which I have noticed.

*Acne* is a name which has puzzled the lexicographers who tried to give the etymology. The word exists in no other but the medical language; it seems to me that it is a corruption of the Greek word ἀχμᾱι; ἡ ἀχμή is the culmination, αἱ ἀχμαί the critical signs of life, and ἀχμᾱι is what we call acne.

*Actinomycosis* is ungrammatical. The genitive of μύχης is μύχηςτος, the correct form is therefore actinomycetosis; this refers also to another word which I find on the list, namely, blastomycosis recta blastomycetosis.

*Cellulitis*.—This is one of the common barbarous hybrids of the abominable appendicitis class. The cell is κύτταρον, the proper one-language word would be cyttaritis.

*Cystus*.—If this word shall be the Latinized, κύστις (Cyst), then it is ungrammatical, because in Latinizing a Greek word we can not change the gender.

*Dermatitis actinica*.—Actinica is supposed to be Latinized Greek, but even if such a construction were permissible, the term dermatitis actinica might be misleading, it could be understood as meaning dermatitis of a radical form, but not, as is intended, dermatitis caused by rays. Actinodermatitis, I think, would answer. By no means should radio-dermatitis be employed except when dermatitis caused by radium is meant.

*Folliculitis* is one of the appendicitis atrocities. Follicle is θυλάκιον. The proper name would be thylacitis.

*Keratosis*.—The word existed in medical nomenclature outside of Greece, perhaps, for one century, but it is ridiculous, a word for a

funny paper, but not for scientific nomenclature; its meaning refers to marital infidelity. The proper term is keratoplastia.

*Lymphangiectasis* is ungrammatical, because a preposition cannot be placed in the middle of a word. Let us write lymphangoectasis. I am at loss, however, why we say lymph instead of lemph, from the original λέμφος.

*Morbilli* is correct; the Greeks call it Hilara.

*Melanoderma*.—I cannot understand the formation dermia.

*Pediculosis* is a corruption; we have to say either morbus pedicularis or phthiriasis.

*Tuberculosis* is a barbarous word. Tubercle is φυμάτιον and the Greeks call the disease in question φυματίωσις



SOCIETY TRANSACTIONS.  
BOSTON DERMATOLOGICAL SOCIETY.

May Meeting.

DR. C. M. SMITH in the Chair.

**Maculae Atrophicæ.** Presented by DR. F. S. BURNS.

This young woman has had a morbid process on the skin of the back of her neck for about a year and a half. On that region there can be seen a circumscribed, white, macular patch two inches in diameter. The lesion is moderately firm but not raised. Portions of the periphery of the patch seem a little elevated, but this is due rather to difference in consistence than to actual elevation. The surface of the affected part is of a dull white hue, with a dry, somewhat parchment-like appearance. Scattered about the periphery of the major lesion are numerous small, white satellite macules, pinhead to slightly larger in size. At the periphery of the principal lesion there is a suggestion of a faint pink areola.

The patient states that the process began about a year and a half ago as a few small white spots, which increased in size, coalesced, and finally formed the present picture. The skin elsewhere is normal.

Histological examination of one of the smaller lesions corresponded closely with the observation of Sherwell and Johnston in a case of similar clinical appearance. The rete mucosum was atrophied, consisting only of a few rows of granular and partially cornified epithelial cells, with complete disappearance of the interpapillary processes. The papillary layer was atrophied. The collagenous bundles were degenerated, has always been a prominent symptom of the affection.

**Discussion:** Clinically the process resembled atrophy rather than hypertrophy, therefore the designation morphœa seemed inappropriate. White spot disease, too, was thought scarcely a sufficiently descriptive title, as it conveyed no idea of its nature. In view of somewhat variable pathological findings in apparently the same clinical process, it would seem well for the present to withhold any distinctive name from which, so far as we now know, is but a localized atrophic process in the skin of idiopathic origin.

**Urticaria pigmentosa.** Presented by DR. JOHN T. BOWEN.

Helen S., at 4 years. The cutaneous affection, on account of which this child is shown, is said to have begun a few months after birth. The process has gradually extended, though as to the initial appearances on the skin the parents can throw little light. The body and limbs are profusely covered with light brown macules and plaques, so closely set that it is only here and there that an area of normal skin can be seen. There

is considerable pigmentation about the hairy border of the scalp. Light friction quickly works characteristic pinkish white wheals. Pruritus has always been a prominent symptom of the affection.

DISCUSSION: *Urticaria pigmentosa* was the accepted diagnosis of this case.

**Impetigo (Bockhardt type).** Presented by DR. F. S. BURNS.

Mary G., æt 47, married. A year ago this patient first came under observation for a scalp affection similar in appearance to the process now present on the scalp. At that time there were numerous lesions scattered over both temporal regions, consisting of small pustules, many of which were pierced by hairs. Under an ointment of salicylic acid and resorcin the lesions healed in two weeks. Five months later the affection began to reappear on the same regions, persisting till now, as she has not taken the trouble to treat it. The present outbreak consists of numerous small pustules, a majority of which are pierced by hairs. On healing, no scars are left by the lesions.

DISCUSSION: Besides folliculitis and its subdivision, the impetigo of Bockhardt, the possibility of *acne varioliformis* was considered. As the affection under discussion was confined to the scalp, and healed without leaving cicatrices, there remained little to support the question of *acne varioliformis*.

**Urticaria bullosa.** Presented by DR. H. P. TOWLE.

This boy, who is four years of age, has had attacks similar to the present one every year for the past three years, beginning in the spring and lasting through the summer. On the body and limbs the eruption begins as a red raised spot, like a mosquito bite, sometimes with a small central vesicle, accompanied by itching. The individual lesions last a few days, and for two to four weeks are succeeded by new crops. A period of remission then occurs, later to be again succeeded by another eruption. The longest free interval has been one month. Coincidentally with the appearance of these lesions on the body and extremities, vesicles, which quickly become bullæ, appear upon the soles and sides of the feet and never anywhere else.

DISCUSSION: The affections differentially considered in this case were: *urticaria bullosa*, *hydro æstivale* and *dermatitis herpetiformis*. *Urticaria* of bullous type was thought to best explain the picture presented.

**Epithelioma treated under X-rays.** Presented by DR. F. S. BURNS.

This patient (a man 56 years of age) shows a cicatrix on the left side of his face near the ear. It is circumscribed, about an inch in diameter, smooth, soft, and a light pinkish red color. This cicatrix is the site of an epithelioma which was healed eight years ago under X-rays. Two years ago another epithelioma developed on the right temporal region, encroaching upon the antitragus. This lesion has progressively grown from an indefinite scaling pea-sized papule to its present size (two inches

in diameter). The lesion is superficial, with indurated and ulcerating borders and a cicatrical center. It is proposed that the lesion be at once treated by X-rays.

**Dermatitis Recurrens (Crocker).** Presented by DR. H. P. TOWLE.

This case is evidently etiologically allied to hydroa vacciniforme. It differs clinically in that it began in adult life and has never been accompanied by scarring. The patient is a woman, 42 years of age, and by occupation a cook.

Eighteen years ago she began to have recurrent attacks of swelling of the exposed parts, which were in every way similar to the present one. For five years exposure to the sun, summer or winter, was followed by redness and swelling of the face and hands. Cold aggravated the attacks, but did not induce them, while artificial heat had no effect upon them. Finally the attacks ceased, the intermission lasting until four years ago, when they began again and have continued ever since. Seven years ago she began to have what she calls "nervous attacks." For two or three days there would be irritability, insomnia, and a constant feeling of impending disaster. After a few days of calm another nervous attack would come on. This continued for two years, when the attacks ceased and have never recurred. One year after the last attack the skin became for the second time susceptible to sunlight. For the past four years exposure to sunlight for twenty to thirty minutes has been followed within a few hours by redness and swelling. In the beginning, the susceptibility was confined to spring and summer, but during the past two years reaction in the skin has followed exposure at all seasons. A few hours after exposure the skin becomes red and then swells. In a day or two the swelling subsides, and for about a week is followed by slight desquamation. She states that the skin is now so susceptible to the action of light that quite mild exposure is sufficient to cause redness. The general health has been good throughout, and except for very mild gastric symptoms she complains of nothing.

The patient first came to the Out-Patient Department of the Massachusetts General Hospital November 8, 1905, when, according to the records, her whole face was slightly swollen. There was also a blotchy erythema about the lips, which suggested the initial stage of herpes simplex. A week later all that remained was a slight redness under the right eye. She was not seen again until April, 1907, when she returned to say that the attacks still continued and were even increasing in intensity. Attempts to ward off the effect of exposure by wearing white and blue veils had been tried, but without success. At the time of this visit her face showed no traces of redness or swelling, but on the following day she returned with marked reaction on the left side of the neck, the ear, forehead, and left cheek. The left eye was half closed on account



of the swelling. She stated that on her way home the day before she was obliged to wait for a car twenty minutes, and stood with the left side towards the sun. Soon after her arrival home the above mentioned parts became red and swelled. Near the corners of the mouth were a few small vesicles.

Discussion: *Hydroa aestivale* of mind grade was thought a preferable designation for the above described condition, from which it apparently differs only in degree. Etiologically the conditions are allied so closely that a separate and perhaps confusing distinction seems scarcely warranted.

F. S. BURNS, Secretary.

### MANHATTAN DERMATOLOGICAL SOCIETY.

Sixtieth Regular Meeting, May 3, 1907.

DR. EDWARD PISKO, Presiding.

**Paget's Disease.** By DR. W. S. GOTTHEIL.

Mrs. Dora B., 42. Four years ago trouble began in her right breast; has had several children, the youngest now six years old, but never any fissures or inflammation of the breast. The ulcerative process involves the nipple, the upper half of which is deeply eroded and the lower part composed of a dense mass of cicatricial tissue. Above the nipple and confluent with it is an irregularly circular, bright red eroded area, shiny on its surface, about an inch in diameter. The circinate border is infiltrated and distinctly waxy. The lesion is quite insensitive and its entire base is markedly indurated. No axillary glandular involvement, and none of the deep tissues of the glands are affected. The case was therefore very suitable for the caustic treatment; amputation was unnecessary, and the X-ray entirely too slow.

In the discussion Dr. GEYSER advocated the use of the tube. In so slow a process there was always time for more radical measures, if that failed.

**Lichen Planus Gyrateus.** By DR. I. P. OBERNDORFER.

N. M., male, 83. Eruption on the back of the left leg first noticed eighteen months ago; soon after a similar lesion appeared on the corresponding area of the right leg. Steady progression of the local lesions; much itching at times; no improvement under treatment. The typical papules, situated on the upper and inner aspects of the legs and knees, are arranged in gyrate forms, the center of each area being normal, and the margins composed of thin bands of confluent and discrete lesions. The rest of the body is unaffected, with the exception of a couple of small lesions of circular shape on the small of the back.

In the discussion of the case Dr. Ochs called attention to the benefit derived from the application of pure carbolic acid once a week to lichen lesions.



**Granulosis Rubra Nasi with General Hyperidrosis.** By DR. L. OULMANN

K. F., male, 12, has suffered from the present affection since his eighth year; a younger brother is similarly afflicted. There is a general hyperidrosis, which is so severe in summer that he is unable to do his school work in warm weather. The nose is especially affected; the patient has to dry it every few minutes during the day. The entire organ is reddened, of a distinctly lower temperature than the rest of the skin, and is studded with a large number of minute white vesicles which, when pricked, permit a droplet of clear sweat to escape. The reporter regards the case as a typical example of the disease described by Jadassohn and Luthlen in 1900, in which the lesion consisted of a permanent enlargement of the sweat glands and their ducts, combined with dilatation of the vessels, œdema and infiltration as noted later in Pick's case. The combination of a general hyperidrosis was of interest, as also its occurrence in two members of the same family.

DR. WEISS regarded the case as one of stagnation erythema combined with hyperidrosis, very close to the lupus pernio of the Continental writers. DR. GOTTHEIL stated that the recorded cases of granulosis described a different hypertrophic condition, and thought the case a chronic rosacea with involvement of the sweat glands and their ducts.

**Cheiopompholyx, treated with X-ray.** By DR. A. C. GEYSER.

Miss B. N., 18. One year ago a group of large vesicles appeared on her left hand, which dried up into impetiginous crusts; at various times later similar lesions appeared at the same place. There have also been vesicles in groups along the distribution of the ulnar nerve on the fingers and back of the left hand. Two weeks ago there appeared for the first time similar lesions upon the right hand. All the lesions have been but slightly painful, but markedly puriginous; there has been some erythema of the tissues in which the vesicles appeared. The treatment has been exclusively with the X-ray, under which the vesicles have dried up and disappeared.

DR. ABRAHAMS regards the case as being a vesicular eczema, and the present mild dermatitis as due entirely to the X-ray. DR. GOTTHEIL understood by cheiopompholyx or pompholyx the appearance of large vesicular or bullous lesions on a non-inflammatory base, entirely without involvement of the neighboring skin, and apparently more closely related to benign pemphigus than to other vesicular dermatoses. The grouping, the itching, the repeated attacks in the same location, and the signs of dermatitis indubitably present would lead him to regard the case as one of dermatitis herpetiformis of the vesiculo-bullous type. DR. GEYSER called attention to the immediate relief of the pruritus by the X-ray as a symptomatic therapeutic measure; it was far more effective than ordinary local applications.

**Recurrent Gummata of the Epididymis.** By DR. M. B. PAROUNAGIAN.

H. R., 32. Urethritis and chancre nine years ago, followed by secondaries; treatment only while the symptoms lasted. Since then has had several attacks of urethritis, and a suppurative inguinal adenitis some four years ago. Eleven months ago he applied for relief from a "swollen testicle." Both testicle and epididymis on the right side were swollen and nodular, and not very sensitive; the condition in no way resembled a gonococcal infection, though he had a discharge; and as he had been treated for lues in the past, he was put upon the same treatment again. There was rapid improvement and the patient disappeared again.

On April 2 of this year complaining again of swollen testicle and "abscess." The swelling started again two weeks before in the testicle that had been previously affected; it had gradually increased and had finally broken; there had been little pain. Examination showed the entire right testicle and epididymis fused into one large indurated mass and adherent to the scrotal tissues. Posteriorly and at the lower part of the organ were two sinuses, from one of which there was a discharge of thick yellowish-green pus. Rectal examination showed normal prostate and seminal vesicles.

In the discussion DR. OULMANN called attention to the fact that the epididymis was the organ chiefly affected; the testicle itself, although more or less fused with that organ, was much less affected.

Primary gumma of the epididymis was a comparatively rare condition.

#### **Generalized Lichen Planus and Psoriasis.** By DR. W. S. GOTTHEIL.

This patient, male, 54, has been under more or less continuous observation since the beginning of 1901, suffering from a chronic inveterate psoriasis. He has had it nearly all his life; has never been entirely free from it, in spite of the most varied treatment at the hands of many different men, and suffers greatly every winter, when the eruption usually extends over the entire body, even the palms, soles, scalp and face being affected.

These facts are mentioned to emphasize the point that the patient, of considerable intelligence, has become quite conversant with the symptomatology of his disease, knows all the various remedies commonly employed for its relief and their effects and has naturally become an expert in regard to it as it appears in his own particular case. From 1901 to date he has been under more or less irregular treatment of various kinds, including phototherapy, radio-therapy, thyroid and all the usual internal and external remedies with only temporary and partial effects.

In June, 1901, he had a marked attack of erythema multiforme, many of the lesions on the legs and arms being very distinctly of the iris variety. He himself first called my attention to the different nature of these lesions from his usual efflorescences. In May, 1906, when I had not treated or seen him for many months, he appeared complaining of a new eruption.

He stated that the new spots were very itchy, which his psoriatic lesions never were, and that they were of a different color and not scaly. Examination showed that scattered over his entire body, intermingled with his ordinary and characteristic psoriasis plaques, were the typical lesions of a very extensive lichen planus. On the legs, especially, the lichen papules were confluent in many places, forming corneous patches that were evidently intensely pruriginous. Under sodium cacodylate internally and bichloride-carbolic applications externally, the lichen planus slowly improved in the course of months, leaving the psoriatic lesions as before; and towards the end of 1906, when I last saw the patient during that attack he was in about his usual psoriatic winter condition. In May of this year he reappeared with a new outbreak of the lichen, which has persisted with but little abatement until the present time. Both varieties of lesions are intermingled over the entire body, but in certain localities, as on the elbows and knees, the pink, scaly psoriasis efflorescences are so prominent that examination of them alone would lead to no other diagnosis; on the other hand, on the thighs and upper forearms there are areas where all the lesions are rectangular, purplish, flattened, shiny and non-scaling, being typical lichen planus lesions. The patient can distinguish them from one another perfectly well; he can pick out a psoriatic mass as part of the eruption that he has had for over forty years, and which does not itch at all, and in its immediate neighborhood point out a lichen lesion that itches intensely and is of the new eruption. Apparent transition forms are not infrequent; many lesions can be found about which it would be difficult to decide whether they are partly cornified lichens or retrogressing psoriasis lesions. I have had occasion a year or so ago to present a psoriatic patient here who had had a typical dermatitis exfoliativa for at least a couple of years, and was treated for it at the City Hospital, and which gradually changed into the commoner disease. This is the first case, however, that I have encountered, with a combination of psoriasis and generalised lichen planus.

#### Subungual Verruca. By DR. B. F. OCHS.

Becky G., aet. 7, came to the clinic a week ago for a "sore" on the third finger of her right hand. On the tip of the finger, and involving the anterior outer edge of the nail, was a soft, hypertrophic, bean-sized mass, very tender to the touch and bleeding easily. When the accumulated blood crusts, detritus, and dirt were cleaned away the lesion was found to be a grayish-red papilliform mass, the seat of which was under the nail and occupying about one-third of its area. It is seated at the root of the nail, occupying the entire region of the lunula, and forming a brownish red, hypertrophic, papillary mass. The skin around the nail bed is swollen and red, and the proximal edge of the nail is raised and loosened from its bed. It is very evident that the growth, if unchecked, will cause complete shedding of the nail. There is another typical



verruca on the side of the index finger of the same hand a short distance from the edge of the falx.

In the discussion Drs. OBERNDORFER, COCKS, OULMANN, and PAROUNAGIAN were inclined to regard the case as an onychia with hypertrophic granulations. Dr. GORTHEIL agreed with the presenter of the case. He had seen the case before and watched the development of the verrucous growth, beginning at the falx and gradually spreading on the nail bed, and undermining and loosening the nail. The process in its early stages was seen in the lesion on the index finger.

M. B. PAROUNAGIAN, M.D., Secretary.

### THE PHILADELPHIA DERMATOLOGICAL SOCIETY.

The regular monthly meeting of the Philadelphia Dermatological Society was held at the Medico-Chirurgical Hospital, on Tuesday evening, December 18, 1907, at 8:30 o'clock. Dr. M. B. Hartzell, presiding.

**A case of haemorrhagic herpes zoster.** Presented by Dr. KNOWLES, through the courtesy of Dr. STELWAGON. The patient was a male, forty years of age. The man was in poor physical condition, using alcohol in excess, and living a life of exposure. His right arm had been amputated two years previously, because of a traumatism. The zoster seemed to follow two different nerves, as it not only showed the typical vesicular groups, over the right upper back and chest, but also in the right axilla, and anteriorly and posteriorly on the upper arm. Numerous groups of these vesicles became, a few days after the start of the zoster, hæmorrhagic. The original injury to the right arm was suggested as a predisposing factor. Pain, burning, and itching were markedly present.

**An unusually extensive case of tinea versicolor** was exhibited by Dr. DYE. The patient was a man of forty-eight had noted this condition for some years. The chest, abdomen, thighs, and the entire back were involved. The neck, cheeks, and chin were also sparingly attacked. The eruption was typical in every respect, excepting that it was somewhat inflammatory. It was remarked that the face is usually exempt in this disease.

**An atypical case of lupus erythematosus** was shown by Dr. HIRSCHLER, for Dr. Schamberg. The patient was a negress, married, and had had this condition for twelve years. On the right side of the neck and face is noted a sharply margined patch, with an elevated and an infiltrated border. The patch covers almost the entire side of the face; the skin is thickened, reddish, and shows the loss of normal pigment; islets of pigment are, however, seen throughout the patch. Small, superficial, and scaly patches are also seen on the nose, the right ear, and posterior to the left ear. About a year or so ago the patch received vigorous X-ray treatment in New York, resulting in an enlargement of the lesion. She has been receiving within the last few months injections of tuberculin,



in doses varying from one-eighteen-hundredth to one thousandth of a milligram. The injections are followed by fever, chills, and other signs of a constitutional reaction. Increased redness is also noted in the affected areas, following this method of treatment. There has been undoubted improvement since the use of this agent; pigment is being gradually restored. Quinine was administered in large doses, but had to be stopped because of the production of a generalized exfoliative dermatitis. Those present discussed the noted question, of the relationship of lupus erythematosus to the true tuberculosis of the skin.

**A case for diagnosis.** Presented by Dr. PFAHLER. The patient was a robust male of sixty-four years. Eight months ago several furuncular like lesions appeared on the neck below the chin. These tumors have increased in size, until now there are six walnut-size swellings. These are boggy and markedly inflammatory. Some of the hairs have fallen out in the involved areas and the others are easily depilated. The entire neck is densely infiltrated and erysipelatous in appearance. A purulent and slightly blood tinged discharge exudes from one of these tumors, which had been incised. The patient's health is unimpaired. The hairs or the discharge had not been examined microscopically. Several diagnoses were suggested—sarcoma, malignant tinea sycosis, gummatous syphilid, and actinomycosis. A thorough microscopical examination was advised, to be followed, in the event of a negative result, by anti-syphilitic treatment.

## SECTION ON DERMATOLOGY.

### NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, HELD DECEMBER 3, 1907.

Dr. A. R. ROBINSON in the chair.

**Sycosis Treated by the X-ray.** Presented by Dr. HOWARD FOX.

The patient is thirty-three years old, born in the United States, married, a clerk by profession. The disease first appeared ten years ago, and persisted obstinately until treatment by the X-ray was begun. The disease has always been extensive, involving the cheeks, and extending down upon the neck. It has occasioned great discomfort in addition to being very unsightly. X-ray treatment was begun a year ago, about thirty exposures having been given during this time. The beard appears to be permanently epilated and the chin and neck bronzed by the action of the ray. Although a few lesions still remain, the improvement has been very great.

**Lupus Erythematosus, greatly improved by the X-ray.** Presented by Dr. A. SCHUYLER CLARK.

The patient is a woman forty-three years of age, married twenty-

three years. There is no tubercular history in herself or her family, and she and her children have always been healthy. The present trouble began about a year and a half ago, when she first noticed a red mark in front of the right ear. This increased in size up to the time when treatment was begun five months ago, when it was a typical patch of lupus erythematosus the size of a quarter. She received one exposure with a moderately low vacuum tube close enough to produce a first degree burn, which healed in four weeks, leaving the patient apparently without disease, and with an excellent cosmetic effect.

### Lupus Vulgaris healed by the X-ray.

Presented by Dr. A. SCHUYLER CLARK.

The patient is a male, thirty years of age, Russian. He had an injury to the left temple twenty-one years ago which was slow in healing, but which did heal completely. Three and a half years ago he noticed a red spot in front of the left ear, which had grown, when he applied for treatment, to be two inches by an inch and a half, and was a typical patch of lupus vulgaris, with considerable thickening and elevation above the surrounding skin. It was exposed four times to the X-ray—twice at a considerable distance with a high vacuum tube for a considerable length of time, and the last two times with a low vacuum tube at close range, with the idea of getting a decided reaction. He developed a moderate burn in four weeks, which has slowly healed, except a small spot overlying the zygoma. A level and very good scar remains, with no trace of disease.

### Epithelioma of the Lip and Cheek, greatly improved by the X-ray.

Presented by Dr. TRIMBLE.

Case previously shown before the New York Dermatological Society by Dr. Fordyce, q. v.

Dr. CLARK said that in his opinion the gland under the jaw was enlarged, and should be excised.

Dr. ROBINSON thought the result in this case was excellent. There was still a deep-seated sub-epidermal mass of cancer near the angle of the mouth, and for the treatment of it he would advise injuring or destroying the overlying epidermis and then applying X-rays to the injured area; otherwise he doubted if the rays would be effective. In this case he did not find any invasion of the sub-maxillary glands, and he did not think their removal necessary, a complete removal or destruction *in situ* of the primary growth being all that was required. When the glands are invaded, the lymph channels between the primary growth and the glands must contain pathological epithelial cells, hence removal of the glands alone without destroying these cells is not a removal of the disease, and a reappearance is inevitable. Dr. ROBINSON would swab the invaded area during the operation with an agent to destroy nuclei especially, and not treat the wound with the object of union without suppuration.

Dr. TRIMBLE, closing the discussion, said that he agreed with the chairman in his expression of the very bad prognosis of all cases of epithelioma of the lower lip in which the sub-maxillary glands are involved. However, he believed this case to be one of the rodent ulcer type, with practically no glandular involve-

ment, and he hoped to prevent a recurrence by keeping the patient under observation, and occasionally exposing the lesion to the X-ray.

**Dermatrophia linearis.** Presented by Dr. HOWARD FOX.

The patient is eighteen years old, single, born in the United States, a collector by occupation. Seven months ago he accidentally discovered the lesions on the back, while looking in a mirror. They have occasioned no subjective symptoms whatever. He can give no cause for their appearance: he has not received any traumatism to his knowledge, nor has he engaged in any severe muscular exercise. He has always enjoyed good health. Four months ago he contracted syphilis.

Over the mid-dorsal region are five striæ, horizontally placed, varying from two and a quarter to six inches in length, and from one-eighth to three-sixteenths of an inch in width. They are reddish in color, the redness disappearing on pressure and returning soon when pressure is removed. The surface of the lesions is furrowed, the furrows being at right angles to their long axis. By passing the finger lightly across the lesions a very slight elevation is detected at one or two points. There is certainly no visible elevation. When, however, the finger is passed across the lesions with pressure, the sensation of whipcords embedded in the skin is obtained. By careful palpation of the individual lesions, especially in their long axis, the sensation of a groove between two ridges is given. Upon the buttocks there are numerous striæ averaging half an inch in length, and one-sixteenth of an inch in width. They lie in an oblique direction from above downward and outward; they are reddish in color and wrinkled. The patient presents an induration on the penis, and a fading macular syphilide upon the trunk. It is only for the syphilitic infection that he applies for treatment, the lesions upon the back never having occasioned any inconvenience or apprehension.

**Lupus Erythematosus of the Scalp.** Presented by Dr. HOWARD FOX.

The patient is a factory girl twenty-four years old, single, born in Russia. She was always well till six years ago, when the eruption on the scalp first appeared. Scattered over the scalp there are now about fifteen bald areas varying in size from a bean to a quarter. They are for the most part smooth, slightly scaly in places, and somewhat depressed. Over the vertex the patches have coalesced to form a line running antero-posteriorly for six inches. Behind and above the ears are typical scaly patches of erythematous lupus.

**Erythema recidivans urticans faciei in a hereditary syphilitic subject.**

Presented by Dr. LAPOWSKI.

The patient is a woman thirty-five years old, married two years ago. She had a miscarriage three months after marriage. No family history could be obtained. Up to her ninth year she suffered with sores on various

portions of her body: face, lower and upper extremities. The ulcers on the extremities left round soft scars, and on the face longitudinal scars, traversing the region of the cheeks, from mouth corners to the ears, in various directions. She had a saddle nose. She was subject to convulsions in childhood. When twenty-eight years old—seven years ago—her upper lip swelled, the swelling lasting two weeks, and since that time the attacks of swelling have occurred several times during the year, affecting both cheeks and both lips. The attacks were in the beginning accompanied by severe headache, but in the last two years the headaches have diminished. In the beginning the swelling lasted several weeks, and disappeared, leaving no sign, but in the past two years the swelling does not entirely subside, and the attacks are repeated several times during the month. At present the ears, glabella, cheeks, and upper lip are involved. The urine has been examined repeatedly, but nothing abnormal could be detected—no albumen, indican, or casts were present. The patient has never been treated specifically.

**Multiple Spontaneous Keloid.** Presented by Dr. LAPOWSKI.

The patient is a woman forty-two years of age, married. She has been five times pregnant. Her family and personal history are negative. On the right cheek is a soft, pedunculated, reddish, painless, pea-sized growth, which appeared thirty years ago. The growth is redder during the active period of menstruation, and in the past five years it has shown a tendency to enlarge. On the trunk and near the sacral region are four soft veruccæ, from a millet seed to a pea in size. On the sternum are two keloidal growths: the lower is cylindriform, and of fourteen years' duration; the upper and smaller is tubercular and appeared three months ago. Over the arms and trunk there are scattered eleven keloids of various sizes, from a pea to a large bean, and of different consistency. On the arms there are two red spots, remnants of a burn, upon soft pliable skin, with no macroscopical evidence of hardness. The cervix uteri is hard, scar-like, and pale. The patient states positively that the keloids appear on places where no injury occurred. They start as subcutaneous tubercles, which produce a desire for scratching; then gradually they increase in size, and when they reach the level of the skin, the itching subsides.



# REVIEW of DERMATOLOGY AND SYPHILIS

Under the charge of A. D. MEWBORN, M. D.

## REVIEW OF PATHOLOGY.

CHARLES J. WHITE, M. D., Boston.

### **Adenoma Sebaceum, A Case of So-called.**

KRZYSZTAŁOWICZ. *Monatsh f. Prakt. Derm.* 1907, XLV, p. 1.

There are two varieties of this disease according to Krzysztalowicz. The first, characterized by symmetrical, usually single tumors which show a predilection for the scalp; the second, by more or less symmetrical and multiple tumors. The first type appears to be a true hypertrophy of the sebaceous glands which may undergo degeneration. The second seems to include various pathological deviations.

The author's present case consisted of numerous small, hard nodules which had existed on the patient's face since childhood. Some showed telangiectases, others yellow pigment, and other follicular openings.

Three tumors were excised and examined histologically.

The first showed many branching sebaceous glands and dilated follicles full of horny and sebaceous detritus with numerous bacteria. Some follicles were branching and elongated, others small and superficial. Collagen and elastin were normal despite a considerable infiltration and a dilatation of the superficial vessels.

The second nodule exhibited a sebaceous condition similar to that of the first, except that the follicles were less dilated. There was a more pronounced distension of the superficial vessels accompanied by a marked pigmentation in the papillæ. The collagenous and elastic structures consisted of more delicate fibrils than usual.

The third tumor presented groups of superficial and deep cells of various shapes and sizes, some resembling those of soft naevi (somewhat similar to rete elements), and here and there connecting directly with the epidermis. The non-epidermic cellular groups were at times isolated and at others in direct relation with vessels, follicles, sweat glands or between the collagenous bundles. Pigment was found free in the corium or within or without the cells of the epidermically related groups just described. Here also one noted a rarified condition of the elastic tissue which was otherwise normal. In this type the epidermis was stretched and the papillæ were sparse and some epidermic pigment was present.

Adenoma sebaceum is thus in reality a complex title and the world

recognizes four types: 1st. Caspary's sebaceous tumor. 2nd. Pringle's sebaceous, angiomatous and fibromatous mass. 3rd. Darier's angiomatous structure, and 4th, Perry's sweat gland naevous type. Thus we can account for the diverse nomenclature—adenoma sebaceum, naevus sebaceus, naevi vasculaires et verruqueux, naevi symétriques de la face, etc.

**Xeroderma Pigmentosum, Concerning a Case of.** By VIGNOLO-LUTATI.

*Montash. f. Prakt. Derm.* 1907, XLV, p. 21.

The original part of the paper is preceded by a description of the disease based upon the study of nearly one hundred references.

The writer's own case was that of an Italian girl of three years—a blonde, many of whose forebears had had red hair and whose parents were closely related before marriage. Three pieces of skin were excised for pathological investigation, the chief aim of which was to determine the origin of the pigment associated with the disease.

1. *Erythematous Plaque.* The superficial cutis presented the usual signs of inflammation. Incipient keratosis was noted in the sweat and sebaceous orifices. The boundary between epidermis and corium was not clearly defined. Collagen seemed normal but elastin was thin and stained poorly where the cellular invasion was most marked.

2. *Pigmented Plaque in Atrophic Skin.* The epidermis was thinned. Individually the stratum corneum was thicker than normal; the stratum granulosum was poorly developed; the stratum spinosum showed shrunken cells, while the protoplasmic fibrils and Herxheimer's spirals were practically gone. Pigment was present in the palisade layer, mostly intracellular. The papillæ were gone. The upper and middle layers of the cutis were poor in vessels and cells and thus resembled sclerosis in structure. Sebaceous glands and follicles had disappeared and only the remains of the sweat apparatus persisted. Muscular tissue was atrophied. Collagen was straight and compact; elastin regular and thin. Vessels were sparse and in some instances occluded. Pigment was present in cells and in lymph spaces. Where sclerosis was less marked there the inflammatory signs were present and there pigment was observed along the vessel walls, in the vascular lumen and in the endothelial cells.

From these data the author discusses the mooted question of the origin of pigment. He believes that epidermic pigment arises from epidermic cells through a bio-chemical change acting on the nucleus. He therefore does not believe that epidermic pigment is produced in the corium and brought to the epidermis by wandering cells. He believes still further that the pigment of the corium is produced by substances derived from the blood which react on the nuclei of the cells of the corium. He thus agrees with Unna and others who hold that epidermic and dermic coloring matter are of different origin and different chemical composition. In xeroderma pigmentosum these substances are produced through the inflammatory action of the sun on a predisposed skin and the writer

then promulgates the interesting theory that this special predisposition lies in the pathological condition of the body cells due to the blood relationship of the parents.

In conclusion the author states that all the changes of sclerosis, atrophy and pigmentation are secondary to hyperæmic changes in the corium induced by the chemical rays of the sun.

### Epidermic Pigment, Experimental Contribution to the Origin of.

HELLMICH-GRAUDENZ. *Monatsh. f. Prakt. Derm.* 1907, XLV, p. 124.

This contribution is a purely experimental exposition of the theoretical ideas of the previous writer on the subject of the birth of epidermic pigment. The article is introduced by a chronological résumé of the author's predecessors in this field of research, beginning with G. Simon, who in 1841, believed that epidermic coloring matter was derived from dark nuclei in the palisade layer of the rete—curiously enough the belief which exists to-day. Through this long list of more than thirty investigators the ideas see-saw back and forth between the epidermic and the dermic genesis of the pigment, but the majority agree with Simon and the present writer that the former view is correct.

Hellmich-Graudenz shaved the back of two rabbits and left them in the sun from morning until night. On the fifth day the skin became grey, on the eighth day black grey, and on the sixteenth day the integument once white was now black. The hair grew very slowly; on the tenth day it was one-half c.m. long, and at the end of three weeks the longest hairs were only one centimeter in length and were darker than their normal neighbors. After three weeks the shaved portion of the skin began to grow lighter, reaching the normal hue at the expiration of seven weeks. The hairs, however, remained more pigmented than originally, but only at their distal ends.

During the period of exposure the writer excised about 1 cm. of the skin every day and after staining according to the Pappenheim-Unna method examined the sections microscopically. On the third day the epidermic cells began to show abnormalities, including an increase of the nucleolar substance. There were as many as eight nucleoli, or fewer and larger nucleoli, or finally a nucleolus which occupied nearly the whole of the nuclear space. These nucleoli were not round, but crescentic, cornered, long or drum-shaped. The nuclei in turn assumed corresponding deformities or showed protuberances. Accompanying these nuclear disturbances the cell protoplasm became shrunken.

On the third day also was observed an exit of nucleolar substance from the nucleus into or even out of the cell and this substance became pigment. Emerging from the nucleus the nucleoli appeared as granules near the edge of the cell and later extended into the intercellular channels often as long rows of dots. These chromatophores lay mostly in the



palisade layer and spread toward the cutis. The pigmentary granules sometimes obscured the nucleus entirely.

About the seventh day these intermediary figures had disappeared and only pigment remained. From the ninth day a sudden change occurred—marked pigmentation, macro- and microscopically. Chromatophores and unbranched pigment cells (the latter far more numerous) abound, but the nucleolar origin was still everywhere demonstrable. From the twelfth day the pigment was seen in the stratum corneum and cell boundaries were hidden.

From these experiments Hellmich-Graudenz deduces that the epidermis possesses the power of autochthonous pigment production and that as the mother substance of epidermic pigment one must look upon the nucleolar tissue.

A series of forty-seven prettily drawn and colored cellular figures closes this interesting article and convinces the reader of the truth of the author's assertions.

**Atrophia Maculosa Cutis.** VIGNOLO-LUTATI. *Monatsh. f. Prakt. Derm.*, 1907, XLV, p. 329 and p. 404.

The author prefaces his original work by an historical statement concerning this rather disputed condition. The controversy has raged as to whether this condition should be considered as a separate entity or whether it is in reality a sequela of lupus erythematosus. Thibierge in 1891 started the discussion promulgating the latter view point, and Heuss and Oppenheim, Jadassohn, Nielsen, Du Castel, Besnier, Fournier and Salewski Mibelli, de Beurmann and Gougerot, Nicolas and Favre, Boikow and finally Beck have published contributions in favor of one or the other theory.

Vignolo-Lutati describes two personal cases in women beyond middle life in whom developed rapidly and spread slowly bandlike, round or oval plaques, white, glistening, cicatricial, sharply bounded, smooth, soft, movable and compressible. The newer lesions were surrounded by a pink slightly elevated periphery.

Under the microscope the pink periphery showed no epidermic changes. There was some cellular infiltration, especially about the follicles, glands, and vessels, which were more or less dilated. In the mid-corium the perivascular infiltration was most marked and the connective tissue was rich in cells and somewhat disintegrated. This cellular infiltration was composed of small round cells, poor in protoplasm and big in nucleus, and occasional mastcells. There was endothelial thickening and some of the vessels were occluded.

The atrophic areas presented an epidermis thinner in all its layers. Rete plugs were shorter and narrower and in the center were quite gone. The rete cells were flattened and the intercellular spaces were narrowed. The derma showed sparse and horizontally distributed cells. The layers



were dense and follicles and muscles were wanting. Elastin seemed to disappear progressively as one approached the center of the area. The individual fibrils were short, thin, straight and poorly stained and least discernible where the inflammatory infiltration was most emphasized. These changes were most abundant in the upper and middle corium while the lowermost strata were but slightly affected.

These present pathological findings agree with the generally accepted ideas that inflammation comes first (clinically the erythematous stage) followed by the disappearance of elastin (clinically, the atrophic stage).

[There are many other details to this long paper, but they lie outside of the province of this department. Ref.]

**Verrucae Plantares; their Prevalence in Boys and in Young Men and their Pathology.** J. T. BOWEN, *Bost. Med. and Surg. Jour.*, 1907, CLVII, p. 781.

The author was able to summarize twenty-four personal observations. The striking pathological characteristics were as follows:

Where warts are not subject to pressure they appear as a projection above the surface. Where, on the other hand, pressure is frequently present the structure burrows into the cutis and the adjacent epidermis hypertrophies.

The corium presents no particular deviations from the normal. The papillary projections are flattened in the center, but are much elongated and more or less horizontally placed at the periphery.

The epidermis exhibits certain peculiarities. At the periphery there is pronounced acanthosis, papillary enlargement, down-growth of the rete plugs and a very marked hyperkeratosis together with a great hyperplasia of the granular cells. As the center of the wart is approached a rather characteristic change is found—the middle rete cells become vacuolated and appear larger and rounder than their neighbors. This change may sometimes affect only clumps of cells. With this vacuolation is noted an early development of kerato-hyalin which is heaped up at the periphery of the cells. Above this peculiar area the horny layer reaches its maximum thickness and consists of imperfectly keratinized cells.

In a majority of the warts examined Bowen found peculiar protozoa-like bodies in many of the nuclei of the rete cells. They were small, round, highly refracting, sometimes centrally concave, sometimes crescentic bodies of equal size and closely connected with the vacuolization of the rete cells and disappeared at the level of the granular cells. They were found particularly in the greatly swollen nuclei, absorbed the acid dyes and thus were not to be confounded with the cell nuclei. The author feels that these bodies must be interpreted as some form of nuclear degeneration and not as protozoa.

Staining Method for Spirochaetes in Section. F. PROESCHER and W. C. WHITE, *Jour. Am. Med. Ass.*, 1907, XLIX, p. 1988.

This method is so simple that it should be tried by everyone.

1. Harden in alcohol or formalin; the length of time is unimportant.
  2. Imbed in paraffin and cut in usual way; or make frozen sections after hardening in hot formalin.
  3. Stain in picric acid and acid fuchsin solution ten minutes. (This solution is composed of saturated aqueous picric acid, 99 cc. and saturated aqueous acid fuchsin, 1 cc.).
  4. Differentiate in 20 % picric solution in 96 % alcohol 5 to 10 minutes.
  5. Clear with xylol or oil origanum and mount.
- The spirochaete is stained deep red, the fibrous tissue less deeply.

**Adenocarcinoma Lenticulare Capillitii, A Case of.** KREIBICH. *Dermatolog. Zeitschr.* 1907, XIV, p. 651.

This rather unusual type of cancer developed on the scalp of a man of seventy years who had fallen on his head six months previously. The tumor appeared as a closely agglomerated mass of one-half-cheery-stone sized nodules on the right side of the scalp. The lesions were reddish and separated from each other by furrows out of which exuded an ill-smelling, bloody pus. The whole growth suggested a cauliflower and showed no normal skin or hair. The smaller lesions, which developed sparsely on the left side, had a somewhat hyaline, vesicular look. Cervical and supra-clavicular glands accompanied the process.

Anatomically the new growth proved to be a tubular adenocarcinoma which was spreading along the lymph passages. The tumor cells were cubical and large and contained pale protoplasm and large, faint, vesicular nuclei. The tubular look was so strong that the whole mass simulated renal tissue. There was but little interlying connective tissue and no epidermic connections were anywhere visible, but the overlying skin was greatly altered by the upward pressure from the tumor mass below. Surrounding the new growths the vessels were widely dilated; this was especially true of the lymph channels. Cellular infiltration, mostly plasmatic, was not intense anywhere. Metastases were visible in the neck, forehead and accompanying lymph glands.

## BOOK REVIEWS.

**Diseases of the Rectum**, W. C. BRINKERHOFF, M. D. (sic.). Published by Orlan Publishing Co. (not incorporated), 1907.

This little volume is both quaint and interesting. It bears as its device the following aphorism: "There is no good reason why, in the treatment of hemorrhoids, commonly called piles, suffering should be added to suffering in order that suffering may be cured."

Similar gems are scattered with lavish hand throughout the pages that follow. Thus: "The payment of from thirty to fifty per cent. commission, by some surgeons, to physicians for surgical cases referred for operation, may have its influence in causing such frequent endorsement of the surgical operation for piles." Later we learn that the Brinkerhoff method of injection is the talisman to repel the surgeon and to eliminate his commission.

Many interesting case histories are narrated to illustrate this point. How touching is the simple faith embodied in the following statement! "One of the neighbors, a near relative of mine, stated . . . that she did hope I would be successful in the treatment of Mrs. H., as both she and her husband were very anxious that good results might follow and she be restored to health." And right noble was the response of Dr. B. Among other things he summarily dismissed a "thoughtless and revengeful physician and surgeon"—what a saving of commissions!—"who evidently was somewhat miffed," and by his presence alone soothed an attack of nervousness combined with too much 'Spirits Frumenti'." And since that day hysterical attacks (and "Spirits" too, let us hope) no more occur.

The volume is sumptuously illustrated with pictures of instruments closely resembling rectal specula, hypodermic needles, and hard rubber syringes, all bearing the name of good Dr. B. and bearing witness to the fact that a rose with any other initials would smell as sweet.

**Syphilis and Tuberculosis**. By EMILE SERGENT, Masson et Cie, Paris, 1907.

This treatise is a collection into one volume and a critical review of what may be termed the "advanced" French views upon the special relation of syphilis in the etiology of tuberculosis. The first part, entitled "Syphilis or Tuberculosis," is an admirable discussion of the differential diagnosis between syphilis and tuberculosis in different parts of the body, in the infant as well as in the adult. In this section the chapters upon bone, lung, and testicle are eminently sane and lucid, while for the rarer lesions of pleura, mediastinum, etc., many authors are quoted and instances cited.

The second and more important section studies the etiologic relationship of tuberculosis and syphilis. The author's views upon this subject are summed up as follows:

"The relationship between tuberculosis and syphilis is extremely intimate.

"Syphilis, hereditary or acquired, weakens the patient's resistance to tuberculosis.

"The susceptibility of the syphilitic to tuberculosis is directly proportionate to the carelessness of his treatment.

"To attack syphilis is, in some measure, to attack tuberculosis.

"The tuberculous syphilitic, if he survives the initial shock of the combined malady, tends to fibrous tuberculosis; his chance of recovery depends upon immediate, regular, and prolonged 'specific' treatment.



"Specific treatment, if exclusively mercurial and carefully conducted, instead of aggravating the tuberculosis, as has been falsely alleged, exercises a favorable influence upon it and promotes its cure."

The statement in this last paragraph, though running counter to text-book theory, certainly concords with clinical experience. If in the text the author appears to insist too strongly upon syphilis as a cause of tuberculosis, the excess is surely a pardonable one.

**Atlas der Aetiologischen und Experimentellen Syphilisforschung.** Edited by Erich Hoffmann. Berlin, Verlag von Julius Springer, 1908. New York Agent, G. E. Stechert and Co.

This timely publication is intended as a literary monument to the memory of Fritz Schaudinn, the discoverer of the spirochæte pallida, who died in June, 1906. To those who witnessed the demonstrations by Hoffmann at the occasion of the recent International Dermatological Congress in New York it will be an instructive souvenir.

The Atlas is bound in full cloth, contains as frontispiece an excellent photograph of Schaudinn, a short preface, an introduction and fifty-three pages of explanatory text to accompany the thirty-four plates, which latter, in their beautiful clearness and perfection, form the main contents of the Atlas.

The first seven colored plates illustrate monkeys in various stages of inoculation syphilis. Then follow twenty-three more colored and finally four photographic plates, showing in large variety the chief results of the microscopic investigations of the spirochæte pallida and other forms of spirochætes. These include many pictures by workers other than the original discoverers.

It is impossible to mention in detail all the interesting and instructive material collected in the Atlas, which will prove a welcome record of modern syphilidologic research to all engaged in this department of medicine.

J. Z.

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## RESOLUTIONS OF RESPECT TO THE MEMORY OF ROBERT W. TAYLOR.

*Born, August 11, 1842. Died, January 5, 1908.*

Dr. Taylor was one of the founders of the New York Dermatological Society, the oldest dermatological association in existence. Since its organization in 1869, to the meeting held shortly before his death, and at which he was present, he had always been one of its most zealous members.

An indefatigable student, an earnest and convincing teacher, and a brilliant and prolific writer, his death will not only be keenly felt by those who had the opportunity of working with him and profiting by the example of his energy and enthusiasm, but will be regarded as an irreparable loss to the medical profession. Among the eminent names which have been inscribed upon the muster-roll of our society, Dr. Taylor's name will ever rank high. No member has been more faithful in the discharge of its duties, and no one by his professional achievements has shed greater lustre upon its membership.



In our grief at the thought that he will meet with us no more, we feel that we have lost not only a very distinguished colleague, but a most estimable friend.

GEORGE HENRY FOX,  
HERMANN KLOTZ,  
EDWARD B. BRONSON,  
Committee.

### THE DEATH OF DR. ROBERT W. TAYLOR.

At a stated meeting of the Medical Association of the Greater City of New York, held February 17, 1908, the following report was presented and adopted. P. BRYNBERG PORTER, Recording Secretary.

*Mr. President:*

At your direction we call the attention of the Association to the recent death of our late lamented colleague, Dr. Robert William Taylor.

It is wholly fitting that a halt should be called in our proceedings to do honor to him, one of the most distinguished of our members. To us was rendered what was probably his last public service in that domain of medicine in which his life-work was mainly engaged. Even then, hampered as he doubtless was, and with something of his old-time vigor impaired, through the encroachments of the fatal malady to which he shortly after so suddenly succumbed, there was still in evidence that sincerity of purpose, zeal, and earnestness which had always characterized the spirit of his work.

Though chiefly preëminent in the field of that most intricate and absorbing of all enigmas of medical research, syphilis, Taylor's name was also famous for signal services looking to the relief of those other ills of erring flesh, the hideous progeny of lust and folly. Through the welter of these afflictions of humanity, involving as they do the innocent as well as the erring, he waged a life-long combat; seeking the roots and remedies of evil and bearing aloft the torch of hope.

Nor did these Augean labors limit the range of his activities. Beginning his professional career at a time when, more than now, were associated in a common specialty both venereal diseases and the general affections of the skin, his interest in and contributions to dermatology were most valuable and occupied him to the end.

The list of his published works in these fields of research is an extensive one. They have had great influence in the medical world, and a considerable number of them were translated and published in foreign tongues. One of the earlier of his better known contributions thus honored was a paper entitled, "On Dactylitis Syphilitica, with Observations on Syphilitic Lesions of the Joints," published in 1871. The subject matter here presented was a field comparatively unexplored,

and this paper attracted attention far and near. In 1879 Taylor's name became associated with that of Bumstead in joint authorship of the fourth edition of the "Pathology and Treatment of Venereal Diseases." Under the same title, in 1895, after Bumstead's death, Taylor rewrote the book, which was now published under his own name and independently. Subsequent editions (the third appearing in 1904) have the title, "A Practical Treatise on Genito-Urinary Diseases and Syphilis." This work took high rank as a text-book, and still remains a standard authority. In 1897 appeared his "Practical Treatise on Sexual Diseases of the Male and Female," of which a third edition was published in 1905. Another notable work by Taylor was his "Clinical Atlas of Venereal and Skin Diseases," and in addition to these books there was a long list of papers on many themes relating to those subjects with which he was specially concerned; many of them of great value and all elaborated with exemplary care.

Beside his literary labors should be placed his long service at Charity (now the City) Hospital, where he trod in the footsteps of those earlier masters, Van Buren and Bumstead; together with his public teachings as professor in the chairs either of venereal or skin diseases, first at the Woman's Medical College and later at the College of Physicians and Surgeons, as well as at the University of Vermont.

In all of these labors his work was indefatigable. With a catholic spirit he combined the temper of the conservative. Broad in regard to the views of others, the expression of his personal judgment was tempered with caution and reserve.

But, while acknowledging the worth of his intellectual achievements, let us not forget the amiable qualities of the man. By nature impetuous, while sometimes hasty of speech and on occasion resentful of real or fancied injuries, Taylor was a loyal friend and an agreeable man to meet. In his manner, with its air of cordiality, cheerfulness and bonhomie, there was a something that savored of a personal compliment. He liked to be liked, as, in his home life, he loved to be loved. The pity of it is that in his home, where all should have been happiness and content, one deep shadow of affliction succeeded another, till in his latter days lonely grief tinged his life with sombreness, and doubtless accelerated its end. So, in our acclaim over the triumphs of an accomplished career, a successful life, there intrudes the note of pathos, an undertone of sympathetic regret. Peace to his ashes! Lasting honor to his shade!

(Signed)

E. B. BRONSON, *Chairman.*

L. DUNCAN BULKLEY,

JAMES R. HAYDEN,

*Committee.*

# THE JOURNAL OF CUTANEOUS DISEASES

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## HYDROA PUERORUM (UNNA)

By Dr. MARCUS HAASE, Memphis, Tenn., and Dr. ROSE HIRSCHLER,  
Philadelphia, Pa.

Read before the Sixth International Dermatological Congress, New York,  
September 9-14, 1907.

IT seems fateful that eighteen years after Unna<sup>1</sup> so nobly defended the teachings of Bazin your authors should find it necessary to appear before this international body and ask for the proper recognition of a work which so clearly defined the disease under consideration that it seems almost incomprehensible that the English and American authorities should have classed it as they have—under that horribly disfiguring dermatosis, hydroa vaccini-forme.

Crocker,<sup>2</sup> under the general head of hydroas, speaking of dermatitis herpetiform, says "Unna's hydroa puerorum is a sub-variety," but under the title of hydroa vaccini-forme seu æstivale uses it as a synonym of this disease, although in the text he does say that "it must be admitted that Unna's cases differ somewhat from the others in several respects, one important difference being that the vesicles and bullæ were quite superficial and left no scars and often the lesion stopped short at an early stage or remained as papules."

Jackson<sup>3</sup> classes hydroa puerorum under hydroa vaccini-forme, and says it occurs mostly in boys and on exposed parts. . . . Vesicles are prone to become depressed in the center and resemble vaccine vesicles. Scarring apt to result . . . Clinical relation to bullous erythema and herpetiform dermatitis, though differing from them in leaving scars.

Pusey<sup>4</sup> uses the term hydroa puerorum as a synonym for hydroa vaccini-forme without any qualification, and in a footnote says: "Hydroa was a name formerly given to many bullous eruptions; the only disease in which the name survives is hydroa vaccini-forme."

Stelwagon<sup>5</sup> also uses the name as a synonym for hydroa vaccini-forme, but in the footnote on literature quotes Unna's article in the *Monatshefte* as questionable cases.

Hyde and Montgomery,<sup>6</sup> under the title of *hydroa vaccini-forme*, uses *hydroa puerorum* as a synonym, but in the text classing it with *hydroa aestivale* and summer prurigo, says: "The eruptions differ from those of *hydroa vaccini-forme* chiefly in being acuminate papules of a light reddish hue with minute vesicles, which are not umbilicated, and scarring is comparatively slight. The disease is found in girls, though less frequently than in boys."

All this after the title of Unna's paper was: "Concerning Duhring's Disease and a New Form of the Same."

Was all this confounding of two diseases due to his description of one case in which the majority of lesions appeared on the face, ears and neck, or was his defense of Bazin's classification taken as a report of cases of that disease (*hydroa vaccini-forme*) which he, Bazin, was the first to so clearly define?

The case reported below was seen by one of us with Dr. Unna in his private clinic in Hamburg in October, 1906. He said it was a typical case of what he meant by the term *hydroa puerorum*.

The previous history given was furnished by the mother of the child, a woman of much more than ordinary intelligence:

S. E. M., age eight, male, white, of English birth.

Family history unimportant. There is one other child in the family, a girl, who is unaffected.

Previous history: Had pertussis at seven months. Rubella at three years, varicella at five years. No other contagious diseases. General physical condition good.

History of previous attacks: First attack began in infancy, spots occurring at different times, attributed by the mother to teething.

In the summers of the second and third years, he had several very severe attacks, blisters varying in size from a pin-head to a three-penny-piece, on all parts of the body except his head.

This occurred three or four times in the summer, one efflorescence succeeding another before the preceding one had completely disappeared, but these efflorescences were less severe than the original outbreak.

There would then be a period of quiescence lasting from two weeks to four months, when the lesions would again appear.

During the winter of his second year he had two mild, but distinct attacks, and each winter since, the same condition has been noted.

The eruption was less severe during his fourth and fifth years, but in both these years it appeared twice on the face, three or four spots occurring in that region, but healing much more quickly than those on the trunk and limbs.



Each year since he has had attacks, but none so severe as those that occurred during his second and third summers.

In August of this year, he had rather a severe attack, the lesions appearing first on the back and chest, then on the legs, arms, hands and feet in the order named. Later three lesions appeared on the face, but these disappeared in three or four days.

On two occasions, mild acute attacks, followed visits to the dentist.

The child is unusually quiet, not inclined to play just previous to or during the attack.

Present history: October 16, 1906.

Patient a blonde, appeared to be a fairly well developed child, fond of out-door life, but of a nervous temperament, no lung or cardiac disease.

Upon examination, no scarring is found except one small pit upon the forehead, which the mother insists is the remains of an infected varicella vesicle.

Present attack began on the 10th inst., with one small lesion on the right cheek, which when seen was covered with a pale yellow slightly adherent crust. On the 12th, four lesions appeared on the back, quickly followed by others, and at present they are now sparsely disseminated over the trunk and extremities, some thirty lesions in all. *No others appeared on the face, nor are there any on the ears or hands.* The lesions began as erythematous patches, irregular in outline, varying in size from a pin-head to a thumb-nail, accompanied by intense itching and burning. Within 12-15 hours minute, tense vesicles appeared upon these erythematous bases. These vesicles are decidedly superficial, easily ruptured through scratching, which relieves to a considerable degree the subjective symptoms. In the majority of instances, these vesicles coalesce and form bullæ. They contain clear to a straw-colored serum, are not pustular, except when extraneously infected. Yellowish crusting follows. No ulceration. In a few days, crusts fall off and leave red stains with *no scarring*. We saw no erythematous patches that remained as such. Biopsy made from lesion over left tendon Achilles.

October 17, one new lesion on dorsum of fourth toe, right foot.

The crust on right cheek had fallen off, leaving a deep red stain. There was no pitting. Urinary analysis made. Appended. October 18, no new lesions appeared. An unsatisfactory blood examination was made October 17. A second one done on October 20. Both appended. When seen on October 20, crusts from three of the first lesions occurring on the back had fallen off, leaving stains similar to that on the cheek. There was no scarring in any of these.

Crusting continued up to time patient was last seen.

The disease has only recurred twice since this attack. A moderately severe attack occurred in February, beginning on the

eighth, lesions appearing first on the buttocks quickly followed by a similar condition on the back, abdomen and legs, in all about twenty-five bullæ.

An insignificant attack occurred on the 23d of July, confined to the extremities and limited to eight lesions, three on the outer side of right calf, two on left leg and three on right forearm.

In neither of these attacks did any lesions appear on the face, ears, hands or feet. The first attack this year lasted about eight days, the second one in July crusting and falling off in five days.

#### Histopathology:

Upon studying the sections made from the biopsy one is forced to the conclusion that the disease is an acute inflammatory affection, with destruction of its component elements rather than proliferative growth. Vesiculation is the ultimate outcome of the process. The factors productive of the vesiculation must be of a less violent action than some of our vesicular diseases, as in no instance is there visible a sudden, sharp uplifting of the epidermis in toto, forming a solid, overhanging roof.

The serous exudation into the epidermis must be a slow process. There is seen through the prickle layer an intense inter-cellular œdema, the intensity varying irregularly throughout the whole depth of the rete, being of course greatest through the central area of the biopsy. The œdema is such that it stretches the protoplasmic processes to their utmost, frequently compressing the exoplasm, thus reducing the size of the cell. This is observed in the upper part of the rete. Again the compression has proceeded further, so that in some areas the cell wall has given way, freeing the nuclei into scattered groups, allowing them to float in small spaces, which form the early start for small vesicles. This type is found in greater numbers in the upper rete layers.

As the inter-cellular fluid increases in amount and the protoplasmic bridges give way, larger vesicles are formed. The nuclei gradually break from their boundaries and float as part of the vesicular contents. Some of the epidermal cells resist the dissolving power of the serum, but are not able to retain their shape. They become pressed into long, narrow cells, some spindle-shaped with elongated or crinkled nuclei and hang as bands downward from the roof, connect sometimes with the floor below or hang loose, or join with a nearby streamer, thus forming multilocular cavities.

The nuclei sometimes have their shape preserved. They are never œdematously swollen and are never ballooned. They are more apt to be crinkled and irregular.

The base of the vesicles may have a narrow or a broad zone of basement cells or none at all. The lateral walls of the large vesicles usually have their cells long and narrow. In the small vesicles the cells seem to have melted away, leaving but their nuclei, while the neighboring processes form their boundaries. The roof of the larger vesicles has always held firm, unyielding corneum and some portion of the granular layer, two rows of which are generally present; some of the smaller ones have also several layers of undisturbed rete. There have been no nucleated corneus cells found. There has always been a clean sweep through the whole section of normal horny cells.

A very few vesicles have been found between the granular and horny layers, the granular layer appearing cloudy from œdema, taking the stain poorly. A few of the vesicles appear to be in the act of crust formation with exfoliation without causing much downward pressure.

In the peripheral regions of the sections beyond the vesicular areas the prickle cells have œdematous swelling without the intense inter-cellular pressure. Here the epithelial plugs seem rather broad and full, with no mitoses. In fact, there is no mitosis anywhere to be seen in the rete, and no evidence of any newly formed cells. The contents of the vesicles consist of granules and thread of fibrin. Intermingled in the meshes are the nuclei and an occasional isolated undissolved epithelial cell, minus its nutrient processes, also granular debris. The most marked feature is the multitude of mono and multi-nuclear leucocytes. They swarm the vesicles, especially at their bases and in the very small amount of corium present.

After repeated attempts no eosinophiles can be found. Leucocytes are found everywhere. They roll and wedge themselves in from the germinal layer up through the granular stratum almost into the corneum. Mast cells are present throughout, being most conspicuous at the vesicular floor.

One scarcely would believe that scarring would be present, though the vesicles sometimes maintain the whole depth of the epidermis.

It would appear that there would be sufficient basal epithelial cells left to renew the broken continuity, preventing at least any breadth of scar. (Poly. Meth. Blue, Iron Hemat. and Eosin, Del. Hemat. and Eosin, and other stains used.)

It will be remembered that in Bowen's <sup>7</sup> cases many vesicles become depressed in the center and resemble vaccination vesicles, and



around the umbilicated center there is often a ring of fluid and a dark red areola. Dark blue or black centers due to the necrotic and hæmorrhagic corium are seen through the overlying vesicles. Necrosed centers becoming converted into thick black crusts are detached with difficulty, leaving deep scars, "permanent variola like." In sections from one of the biopsies he found that necrosis extended down throughout the entire epidermis and through the corium, ceasing a short distance only from the subcutaneous tissue. A second biopsy from the same case of Bowen's, consisting of a small primary vesicle without the typical central discoloration, showing a vesicle in the center of the rete without the necrosis, as in the first biopsy. But this was not characteristic of the lesions. He says that as far as these sections indicate, "the disease begins as an inflammation in the epidermis and upper part of the corium in circumscribed areas, and speedily results in the formation of vesicles in the rete. In these lesions they do not end here. the epidermis and corium underlying, deep down, become necrotic, all of which show and give rise to the dark red center seen in the well-developed lesion, and to the dark violet points as described."

In McCall Anderson's <sup>8</sup> two cases of hydroa æstivale the lesions were limited to the face, ears, neck and hands, and the vesicles which broke with crusting left severe scarring, even to the point of contractures. Unfortunately there was no biopsy made in these interesting cases. However, here, as in Bowen's, there must have been a deep necrosis, much deeper than the epidermis.

In J. C. White's <sup>9</sup> article on hydroa vacciniforme, he claims that the lesions left scars and pits and that excoriations and crusts were present with the lesions; and he has observed other instances of children where the lesions were confined to the ears and backs of hands, characterized by umbilicated and necrotic conditions, recurrence and cicatrices, and that these are typical of Bazin's disease, hydroa vacciniforme. In his article he quotes Duhring to have said: "I believe scarring may occur in dermatitis herpetiformis, but it is rare, especially in a marked form, and I regard such cases as peculiar, that is, where scars exist a year or two after the eruption had disappeared." White here also says that "Unna's hydroa puerorum is certainly a different affection."

Handford <sup>10</sup> reports a case of hydroa æstivale in which the disease was limited to the face and left scars, and mentions a case of Mr. Hutchinson, described at a meeting of the Clinical Society of London, December 14, 1888, that had been under Mr. Hutchinson's



observation from the years eight to twenty, and which, while disseminated over the whole body, was sparse on the trunk, worse on the hands and face, and especially severe on the ears, and "his face was scarred all over, as if from smallpox, and the ears were reduced to a gristle covered by thin scars." The patient was never wholly well excepting in cold weather.

Elliot <sup>11</sup> believes his case to be the same as Tilbury Fox's hydroa simplex, in which there was little crusting and no scarring. A biopsy of a freshly occurring lesion was made. In this section work the stratum corneum was broad and well defined, with loosened and separated layers, especially near the vesicles, but marked around "that portion of the sweat ducts which passed through it," and over some of these latter it was raised, forming vesicles. The nuclei were retained almost to the surface. The stratum lucidum was scarcely demonstrable, and the stratum granulosum was seen limited to a single layer.

The rete near the vesicle became acanthotic, more than doubling itself. The cells became long and narrow, slightly granular and somewhat loosened, nuclei occasionally absent, but as a whole they were well stained.

He speaks of its being an inflammatory reaction, but does not speak of the marked stream of leucocytes into the vesicles and surrounding areas.

In his summary he concludes "that the point of origin of these lesions is primarily in the epithelia of the sweat ducts just below the horny layers of the epidermis, extending from there to the rete; and that the secondary symptoms are those of inflammation seated especially in the papillary layer."

One can see that there are a number of differences between the histology of this case and that of ours.

In the specimens of hydroa puerorum no connection was seen between the coil glands and the vesicles.

In Gilchrist's <sup>12</sup> report of a case of dermatitis herpetiformis of Duhring, he says that it is apparent that the vesicles are formed gradually between the epidermis and the corium. That the changes have chiefly occurred in the upper part of the corium, which shows an invasion of the acute process. He speaks of first a few wandering polynuclear leucocytes in the epidermis, but "by no means numerous." In one or two places, especially near the large vesicles, a few vesicular spaces occurred in the epidermis, but connected with the vesicle below. No mitosis was present. Some of the nuclei were

shrunk and appeared to be situated in a vacuole. No alterations were noticed in a sweat duct appearing to pierce it. On account of the pressure from the vesicle the cells of the overhanging epidermis were somewhat flattened.

Some eosinophiles were found in the vesicles. The corium was most markedly affected. Many polynuclear leucocytes were found here, as well as mononuclear cells and undoubted eosinophiles. These eosinophiles seemed to be prominent, "even under low power." As the stages grow later, the leucocytes grow in numbers, apparently being the main changes, but no corresponding growth of eosinophiles. Later still, the papillæ grow larger, obliterating the inter-papillary spaces and increasing the size of the vesicles, with a corresponding increase of cells. "The greatest variety of cells are seen at the base of the vesicles."

In a sort of a summary there is noted that dilatation occurs first in the blood-vessels in the upper part of the corium, particularly the papillæ, serum exudation as evidenced by coagulated albumen, with emigration of polynuclear leucocytes, eosinophiles, and fibrin in the connective tissue. Then there is a massing of polynuclear leucocytes chiefly in the upper part, with displacement of papillæ. As this increases, diapedesis of eosinophiles is more noticeable. This continues until sufficient to produce vesiculation.

Pitting and scars occur with this disease because the vesicle is entirely beneath the epidermis, which is simply raised in a mechanical manner by the inflammatory exudation beneath. The epidermis is in itself normal, although over the vesicle it appears flattened out. The process is an acute one, as seen by the polynuclear leucocytes. The changes do not extend very deep into the corium. The glands are unaffected.

Gilchrist says that here the picture does not entirely agree with Unna's, although the changes have occurred in the corium in the papillary bodies, and the vesicles were formed beneath the epidermis. In this case he (Gilchrist) believes that the process was more acute.

Others have agreed in the report of the diapedesis of eosinophiles. It is certain that there are none present in the specimens we have of hydroa puerorum. It may be that the process, though acute, was, as has been said before, not so acute as to create the outpouring of eosinophiles, but sufficient to produce the outpouring of polynuclear leucocytes.

The findings of Gilchrist correspond more with our findings than the other men's in their hydroa vacciniforme.

The sudden stream of leucocytes and serum into the epidermal tissue would account for the preliminary erythema and swelling. It can be seen that deeply seated small vesicles may exist under a firm, horny roof, and still present grossly the appearance of papular lesions. The multiplicity of the vesicles may also be evidenced as true vesicles in groups, or grossly as isolated vesicles, while isolated there are microscopically more present.

Brooke,<sup>13</sup> who reports two typical cases (one in a girl) of hydroa vacciniforme, quotes from the report of Buri's<sup>14</sup> case, who in turn quotes Bazin's<sup>15</sup> original article describing the disease, as follows:

"Hydroa vacciniforme is a rare and little known affection. The majority of cases were taken for syphilis and scrofula. They were of long duration and resisted the most varied methods of treatments. Symptoms . . . appears first after an exposure to fresh air or to the rays of a powerful sun. Some feeling of malaise and loss of appetite often accompanies the outbreak. The eruption often shows itself primarily upon the unclothed parts of the body, especially the nose, the cheeks, the hands, and later upon the other parts. Red patches are first noticed, on which transparent vesicles of herpes appear. From the second day the vesicles present a distinct dell; they soon lose their transparency, and at this moment they resemble a variola or vaccine pustule; in a short time a crust forms extending from the center towards the periphery. In some patients the numerous scars give a distinct impression of a previous variola, in others the sero-purulent secretion and the thick crust would lead one to the belief that the case was one of impetigo, did not a few outlying efflorescences in the course of development prevent such an error. The affection often drags on for months, owing to the development of constant fresh eruptions. In one case it lasted six months continuously. Relapses are frequently seen, originating from the changes in the temperature."

After the foregoing, we do not think there can remain any doubt in your minds that these are separate and distinct diseases.

Clinically there are but two similar features: first, that the lesions are grouped vesicular ones; second, they both occur in young males. There the similarity ends.

In hydroa vacciniforme the disease occurs almost exclusively on the face, ears, and hands. The grouped vesicles coalesce, form bullæ, become umbilicated with dark blue or black centers. The crusts are thick and black and are very adherent, and upon removal leave dis-

tinct ulcers, and the ultimate outcome of the process is variola-like pitting and scarring.

In our case of hydroa puerorum, the face was the region least affected, the trunk and limbs being the most seriously involved.

The grouped vesicles or bullæ were never dark, being from a clear to straw color. There was no umbilication. The crusts were light yellow and slightly adherent, and when removed left only deep red stains. There was never any pitting. All of this is true of the five cases reported by Unna, except one in which the majority of lesions appeared on the face.

In hydroa vaccini-forme the heat of the sun, and to a less degree cold winds, are the exciting causes. This is not necessarily true in hydroa puerorum, as evidenced by the two attacks following visits to the dentist, and the attack which we were fortunate enough to witness, which began on October 10, in exceedingly mild and pleasant autumn weather.

As to the histology of the two diseases, there is even a more marked difference than in the clinical pictures as is shown by comparing the findings of those quoted with our own.

In Unna's article he describes hydroa puerorum as a form of Duhring's disease. Can this position be sustained to-day? We do not think so.

Few cases of Duhring's disease have been reported as occurring in children, none beginning in the first year. The youngest on record we believe to be three years of age, reported by Crocker.

Hydroa puerorum begins in the first year. In Duhring's disease, the lesions are polymorphous. In hydroa puerorum, the polymorphism is decidedly limited.

The duration of Duhring's disease is from three weeks to as many months. Hydroa puerorum is a disease of short duration, attacks rarely lasting over fifteen days.

In Duhring's disease, male and female are alike susceptible. In hydroa puerorum, only the male is attacked.

The difference histologically is much more marked as is shown in Gilchrist's masterly description of his findings, and Unna<sup>16</sup> summarizes the histological condition as follows:

"The œdema and cellular infiltrations corresponding to a vesicular area of the skin whose chief seat is in the papillary body, the utterly passive behavior of the epithelium which only presents œdema and inter-epithelial blisters, or is completely elevated by serum and finally the complete absence of leucocytes."



In claiming for this disease a place in our nomenclature as a dermatological entity, we offer the following description culled largely from the original:

First, an acute erythemato-vesicular disease, preceded and accompanied by intense burning and itching.

Second, the vesicles coalescing to form bullæ.

Third, involution of lesions without pitting and scarring.

Fourth, the first attack occurring in the first year of life.

Fifth, recurrence of attacks independent of external influences.

Sixth, gradual lessening of attacks in extent, intensity, and duration.

Seventh, spontaneous disappearance at puberty.

Eighth, unrestricted as to any particular region.

Ninth, restricted to male sex.

Tenth, relatively normal health during attacks.

Eleventh, to this may be added the superficial character of the disease, the lesions being confined to the rete.

We acknowledge with thanks our indebtedness to Dr. Unna for allowing us to study the case and to Dr. Carl Enoch of Hamburg, for urinalysis and blood examinations.

#### URINALYSIS

REACTION	ACID
Spec. Gravity .....	1.027
Total solids .....	6.29%
Albumin .....	none
Sugar .....	none
Acetone .....	none
Bile pigment .....	none
Chlorides .....	.76%
Phosphates .....	.243%
Uric acid and urates.....	.033%
Urea .....	1.38%
Residue—sulphates, etc.	

#### BLOOD EXAMINATION

October 17, 1906:

The counting of the red blood corpuscles showed the normal number of 4,800,000.

The proportion of the red to the white blood corpuscles could not be ascertained, as in five preparations not one leucocyte was found on the counting chamber. Only in the sixth preparation one leucocyte was found outside the chamber.

The stained preparations did not show any difference from the normal, aside from the fact that we found that here also the number of leucocytes appeared diminished.

However, as the above finding may have possibly been accidental, I would recommend a second counting.

October 20:

Hæmoglobin .....	67%
Red corpuscles .....	4,596,000
White corpuscles .....	8000

There was no increase, rather a diminution of eosinophiles.

(Signed) Dr. CARL ENOCH.

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## FRAMBOESIA TROPICA (YAWS, PIAN, BOUBA).

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(Concluded from page 168)

### INOCULATION OF MONKEYS WITH THE BLOOD OF THE GENERAL CIRCULATION FROM A YAWS PATIENT

About 5cc. of blood was withdrawn (September, 1906) with all aseptic precautions, from a vein at the bend of the elbow of a patient suffering from a typical yaws eruption on the legs, back, and face, but not on the arms; the needle, therefore, could be inserted through a perfectly normal skin without touching any yaws element. One cc. of the blood was well rubbed into deeply scarified spots on the right eyebrow of a macacus. Thirty-three days later a small deeply raised brownish papule appeared. Before the papule became moist a scraping was taken and stained with Leishman's method according to the directions already given by me. Numerous individuals of the spirochæte *pertenuis* were present. The papule slowly enlarged and became covered with a crust. The lesion disappeared within three months; no other elements developed.

This experiment shows that:

1. Monkeys can be successfully inoculated with the blood of a yaws patient.

2. The spirochæte *pertenuis* is, at least temporarily, present in the blood of the general circulation, though, so far, I have not been able to detect it microscopically.

### INOCULATION OF MONKEYS WITH THE SPLENIC BLOOD DERIVED FROM A CASE OF YAWS

About 1cc. of splenic blood was obtained by puncturing the spleen of a patient affected with typical yaws. Films showed that the spirochæte *pertenuis* was present, though very rare. The splenic blood was inoculated in two monkeys of the genus *macacus* (*Mac. pileatus*) with the usual technique. Result positive in one monkey, a frambætic papule developing after an incubation period of thirty-six days; the result was negative in the other monkey.

## INOCULATION OF MONKEYS WITH THE CEREBRO-SPINAL FLUID OF YAWS PATIENTS. NOVEMBER, 1906

Four monkeys (two *Macacus pil.* and two *Semnopithecus priamus*) were inoculated with cerebro-spinal fluid derived from three different patients affected with yaws. The c.-s. fluid was in all the cases perfectly limpid; on centrifugation did not show any sediment, and the spirochæte *pertenuis* could not be found, though it was present in the skin lesions of the same patients. Up to date (July 15, 1907), eight and a half months after inoculation, the result has been negative.

## INOCULATION OF FILTERED YAWS VIRUS. SEPTEMBER 14, 1906

The scrapings from non-ulcerated human papules containing the spirochæte *pertenuis* in such abundance as is seldom the case—and no other germs which could be detected microscopically or by cultural methods—was mixed and well triturated with normal saline solution. Preparations made from this mixture showed many individuals of spirochæte *pertenuis*. Part of the mixture was then inoculated, with the usual technique, into two monkeys of the genus *macacus* (*Mac. pileatus*). The rest of the mixture was filtered through a Berkefeld filter (12a); preparations made from the filtrate did not show presence of the spirochæte. The filtrate was inoculated into three monkeys of the same species (*Mac. pil.*) and one *Semnopithecus priamus*. Both monkeys inoculated with the unfiltered material developed—one after twenty-five days, the other after forty days, frambœtic papules at the seat of inoculation, covered by a thick crust. Films made from the scrapings of the frambœtic lesions of both monkeys contained the spirochæte *pertenuis*. The four monkeys inoculated with filtered material have not shown any eruptive element, either at the place of inoculation or in any other region of the body, though ten months have elapsed since the inoculation. This experiment tends to prove that the spirochæte *pertenuis* is the true cause of yaws, as when it is removed from yaws material, the latter is no longer infective.

## INOCULATION OF SYPHILIS IN MONKEYS PREVIOUSLY INOCULATED WITH YAWS

Monkey No. 4 (*Mac. pil.*). This monkey was successfully inoculated with yaws in February, 1906. On June 16, 1906, the scrapings from a primary sore of a syphilitic patient was well rubbed in scarified spots on the prepuce of the monkey's penis. On the twenty-



sixth day after inoculation a small vesicle surrounded by a reddish halo appeared. The vesicle broke, leaving an erosion surrounded by infiltrated tissue. The glands of both groins became enlarged and hard, and could be easily felt. No secondary eruption appeared, but, as shown by Metchnikoff and Roux, this is almost always the case when experimenting with monkeys of a low type.

Monkey No. 11 (*Mac. cyn.*), September 10, 1906. Inoculation of human yaws taken from a non-ulcerated papule, on the left eyebrow, and human syphilitic virus on the right eyebrow. The syphilitic material was taken from the primary sore of a man. After thirty-two days the left eyebrow, inoculated with yaws, showed three small flattened papules which fused together into an elevated mass the size of a pea, covered by a thick crust. The right eyebrow, inoculated with syphilitic material, thirty-nine days after inoculation presented a tiny brown crust, which soon broke and became covered with a slight crust. As regards the appearance of the yaws and the syphilitic lesions the yaws lesion was larger, more elevated, and covered by a much thicker crust. The syphilitic lesion disappeared after two months, while the frambœtic one is still present.

#### TRANSMISSION OF YAWS FROM MONKEY TO MONKEY

Monkey No. 21 (*Mac. pil.*) was inoculated on the left eyebrow with human yaws virus taken from a non-ulcerated papule, on September 19, 1906. From the infiltrated spot which appeared four days later, and which contained the spirochæte *pertenuis*, a scraping was taken and inoculated on November 22, 1906, in three monkeys of the same genus and species, and four monkeys of a different genus (*Semnopithecus priamus*).

Of the three monkeys of the same species the results were in two cases positive, the incubation period being thirty-one days in one and forty-two in the other. Of the four monkeys of a different species one only gave a positive result,—after an incubation period of sixty-seven days.

#### INCIDENCE OF THE SPIROCHÆTE PERTENUIS IN MONKEYS INOCULATED WITH YAWS, IN COMPARISON WITH THE INCIDENCE OF THE SPIROCHÆTE PERTENUIS IN MAN SUFFERING FROM YAWS.

The results of the investigation are collected in the following two tables:

TABLE I.—INCIDENCE OF THE SPIROCHÆTE PERTENUIS IN MONKEYS  
INOCULATED WITH YAWS

Material investigated.	No. of monkeys examined	No. of monkeys in which positive results were obtained.
Primary lesion at the seat of inoculation.....	16	15
Framboetic papules which appeared some time after the primary lesion.....	3	2
Spleen juice . . . . .	4	3
Bone marrow . . . . .	4	1
Blood, general circulation.....	15	nihil
Smears from liver.....	4	nihil
Lymphatic gland . . . . .	6	3
Brain substance . . . . .	4	nihil
Cerebro-spinal fluid . . . . .	4	nihil

TABLE II.—INCIDENCE OF THE SPIROCHÆTE PERTENUIS IN YAWS  
PATIENTS

Material investigated.	No. of case ex- amined.	No. of cases in which positive re- sults were obtained.
Primary lesion . . . . .	6	6
Unbroken papules of the general eruption...	76	75
Ulcerated papules of the general eruption...	76	52
Blood of the general circulation.....	20	nihil
Spleen blood . . . . .	5	3
Cerebro-spinal fluid . . . . .	6	nihil
Lymphatic glands . . . . .	11	6

Comparing Table I with Table II, it will be seen that the incidence of the spirochæte pertenuis is practically constant in the eruptive elements both in man and in inoculated monkeys.

In the monkeys I have experimented with, the eruption does not become general as in man; notwithstanding this, we must admit that in monkeys also we have to do with a generalized infection, as is proved by the presence of the spirochæte pertenuis in the spleen and lymphatic glands.

#### THE HISTO-PATHOLOGY OF EXPERIMENTAL YAWS

Monkey No. 4 (*Mac. pil.*).—In this monkey, nineteen days after inoculation, as already described, a small infiltrated spot appeared at the point of inoculation over the left eyebrow; the lesion became moist, the secretion drying into a thick crust and attaining the size of a sixpenny piece in about two weeks. Two months later, the first lesion being still present of the same size and with the same characters, four more papules appeared, two close to the first lesion, and two just above the upper lip. These papules remained always of small dimension and disappeared within three months. It is pos-

sible that these four papules were due to auto-inoculation by scratching; it cannot be excluded, however, that they might represent a partial secondary eruption comparable to the general secondary eruption which appears in man; it must be remembered that though the skin lesions in experimental yaws—with the monkeys I have used—are generally localized at the point of inoculation, the infection is general, as is clearly proved by the presence of the spirochæte *per-tenuis* in the spleen of the animals.

On the 1st of June, 1906, the crust from the primary lesion was removed; from the raw elevated granulating surface a piece of tissue was cut, divided into small portions, and fixed in various ways (alcohol, sublimate, etc.); then imbedded in paraffin. Sections were stained with various methods (Pappenheim's, etc.). The two papules which appeared above the upper lip were also removed and investigated by the same methods. The results of the histological examination are briefly the following:

(1) *Primary lesion*.—(a) A well marked proliferation of the interpapillary processes.

(b) A cellular infiltration consisting of: (1) numerous typical plasma cells, found diffusely with no definite arrangement. (2) some extravasated polymorphonuclear leucocytes; (3) small mononuclear leucocytes, connective tissue cells, and a few mast cells. No true giant cells were observed. The fibrous stroma is very delicate and scarce.

(2) *Papules removed from Lip*.—Practically the same result, only the proliferation of the interpapillary processes is much less marked.

Comparing these results with those found by Macleod, Unna, Nicholls, Plehn, and myself, in man, it would seem that the histological structure is practically the same in human yaws as well as in experimental yaws.

#### THE BORDET-GENGOU IN YAWS

I have applied to yaws this reaction following the technique used in syphilis by Wassermann, Neisser, and Brück (See *Deutsch. med. Woch.*, May 10, 1906).

As is well known the principle of the reaction is this: when complement is mixed with the complex antigen + immune body, and afterwards some sensitized red cells are added, no hæmolysis takes place, as the complement has been already taken up by the complex antigen + immune body, and cannot, therefore, get fixed to the hæmolytic receptors.

If the complex antigen + immune body is absent, or only antigen, or only immune body is present, then the complement will remain free, and, on addition of the sensitized red cells, will get fixed to the hæmolytic receptors and hæmolysis will take place. From the absence or presence of hæmolysis we can, therefore, detect the presence or absence of the complex antigen + immune body. As the following experiments prove, it is possible to demonstrate the existence of specific yaws antigen and antibodies.

*Experiment I.*—To the extract of non-ulcerated yaws papules, containing abundantly the spirochæte *pertenuis*, some serum (heated to 55° C.) is added, derived from a monkey which has been successfully inoculated with yaws, and which had been afterwards treated at intervals with subcutaneous inoculations of yaws material. Then some fresh guinea-pig serum (complement) is added, and after a certain time some sensitized red cells, in my case goat red cells, treated with inactivated serum from a rabbit which had been inoculated several times with goat red cells.

Result: No hæmolysis.

The investigation is repeated, using the extract of papules taken from six other different cases of yaws.

Result: Constantly the same, viz., no hæmolysis.

*Experiment II.*—Same procedure as in Experiment I., using instead of the extract of yaws papules, the extract of leprosy nodules.

Result: Well-marked hæmolysis.

*Experiment III.*—Same procedure, using the extract of nodules taken from a case of pseudo-granuloma pyogenicum.

Result: Hæmolysis.

*Experiment IV.*—Same procedure, using instead of the extract of yaws papules the extract of syphilitic condylomata.

Result: Hæmolysis.

*Experiment V.*—Same procedure, using the extract of a syphilitic primary sore which presented numerous individuals of spirochæte *pallida* of Schaudinn.

Result: Hæmolysis.

*Experiment VI.*—Extract of yaws papules containing the spirochæte *pertenuis*, + serum (heated to 55° C.) of a monkey immunized for syphilis, + fresh guinea-pig serum, + sensitized red cells.

Result: Hæmolysis.

The experiment is repeated, using the extract of papules from



six different cases of yaws, always with the same result, viz., hæmolysis. It is to be noted that the serum of the monkey contained with certainty syphilitic antibodies, as by inactivating it and then adding to it the extract of a primary syphilitic sore, then fresh guinea-pig serum (complement), then sensitized red cells, no hæmolysis takes place.

*Experiment VII.*—Extract of yaws papules, + serum (heated to 55° C.) derived from a normal monkey, + fresh guinea-pig serum (complement), + sensitized red cells.

Result: Hæmolysis, well marked.

*Experiment VIII.*—Extract of spleen juice obtained by puncture of a case of typical yaws, + inactivated serum of a monkey immunized for yaws, + complement, + sensitized red cells.

Result: No hæmolysis.

*Experiment IX.*—Same procedure as in Experiment VIII., using, instead of the serum of a monkey immunized for yaws, the serum of monkeys immunized for syphilis.

Result: Hæmolysis.

The above experiments show that it is possible to detect specific yaws antigen in the yaws papules and in the spleen of cases of yaws; specific yaws antibodies in the blood of monkeys treated with inoculations of yaws material.

The Experiments IV., V., VI., IX. show also that yaws antibodies and antigen are different from syphilis—antibodies and antigen, and therefore syphilis and yaws cannot be the same entity.

#### COMMUNICABILITY OF YAWS. DO INSECTS PLAY A ROLE IN THE TRANSMISSION OF THE DISEASE?

As is well known, the disease is in most cases conveyed by direct contact from person to person, usually by absorption of the virus through some pre-existing abraded surface or small wounds or ulcerations which are frequently present on the skin of natives. The simple contact of the virus on normal skin is not sufficient to cause the infection; but very slight abrasions—as, for instance, those due to scratching—are sufficient for the entrance of the virus.

Women are frequently infected by their children, the primary lesion appearing often on the mammæ. In the native women of Ceylon the primary lesion frequently develops on the skin of the trunk just above the hip. This is due to their habit of carrying the child astride of the hip, as shown in Fig. 3. Any yaws element present on the scrotum and nates of the child will therefore be

continually rubbed against the skin of the mother and infection will take place through any slight abrasion already present, or that may be caused by the friction.

In my opinion, however, there can be little doubt that, in certain cases, insects may carry the disease.

It is very noticeable that flies eagerly crowd on the open sores of yaws patients. In the hospitals, as soon as the dressings are removed, the yaws ulcerations will become covered with flies, sucking with avidity the secretion, which they may afterwards deposit in the same way on ordinary ulcers of other people. Ants also are occasionally seen to go on the yaws ulcerations as well as on ordinary ulcers.

In Nuttall's classical work on the role of insects as carriers of parasitic diseases, several authors are quoted (Alibert, Hoish, Cadet, Wilson) who believe that the infection may be conveyed from one individual to another by flies. Wilson states that this belief prevails also among the natives of the West Indies.

I may quote some of the experiments I have made to prove that flies are instrumental in the dissemination of the disease:

*Experiment I.* (November 10, 1906).—Some scraping was collected from slightly ulcerated papules of a yaws patient. The spirochæte pertenuis was present, together with various other thicker spirochætes (*S. obtusa*, *S. acuminata*), but no bacteria. The scraping was placed in a sterile petri dish. Ten flies (*Musca domestica* and allied species), caught in the rooms of the Bacteriological Institute, were placed inside the petri dish and left there for half an hour. They fed greedily on the material; then the proboscis and buccal organs as well as the legs were examined for spirochætes, making extracts and films; in nine flies the spirochætes of the thicker type were found; in two also the spirochæte pertenuis. As control, five flies were caught the same day, in the same room, and examined at once, with negative results as regards the presence of the spirochætes.

*Experiment II.* (January 12, 1907).—Twenty flies were collected from the rooms of the Bacteriologic Institute. The buccal apparatus and legs of five of them were removed and examined by making extracts and films; no spirochætes of any kind were present. The other fifteen flies were divided into several groups, and placed on various semi-ulcerated papules of three yaws patients presenting the spirochæte pertenuis, and spirochætes of the thicker kind as are often found in semi-ulcerated lesions. The flies were kept in place

by covering the papules with a piece of gauze made to adhere to the skin by means of collodion all round the margin. All the flies fed greedily on the ulcerated papules. After two hours the proboscis and other parts of the mouth organs, as well as the legs, were removed, extracts and films made and stained. Out of the fifteen so examined, in fourteen it was possible to detect the coarse spirochætes, and in two the spirochæte *pertenuis* as well as the thicker ones.

TRANSMISSION OF YAWS TO MONKEYS BY MEANS OF FLIES FED ON YAWS  
MATERIAL

*Experiment III.* (November 15, 1906).—Thirty flies were fed in a sterile petri dish for half an hour on scrapings taken from non-ulcerated papules of a case of yaws containing only the spirochæte *pertenuis*. Three monkeys of the genus *semnopithecus* (*S. pria.*), and two of the genus *macacus* (*Mac. pil.*) were inoculated in this way; over the left eyebrow of each monkey very numerous deep scarifications were made; then five flies deprived of their wings, were applied to the scarified spots and kept there by means of a piece of gauze smeared with collodion at the margins. The monkeys had their legs tied together to prevent their removing the gauze. After two hours the gauze and the flies were removed. Of these monkeys, one, *Semnop. pria.*, after forty-five days developed a small infiltrated spot, which soon became enlarged and covered with a thick crust. The microscopical examination of the lesion showed the presence of the spirochæte *pertenuis*. The other five monkeys gave negative results.

*Experiment IV.*—Twenty-eight flies (*Musca domestica* and similar species) were caught in one of the rooms of the Bacteriological Institute. The legs and buccal organs of five were removed and examined for spirochætes, making numerous preparations with negative results. The remaining flies, deprived of their wings, were placed on two slightly ulcerated elements of a yaws patient. The flies were kept on the ulcers by means of a piece of gauze, the margins of which were made to adhere to the skin with a little collodion. The flies sucked readily the secretion of the ulcers. After one hour the flies were removed; meanwhile seven monkeys of the genus *semnopithecus* (*Semno. pria.*) had deep scarifications made over their eyebrows. Several flies which had fed on the ulcerated yaws lesions were placed on the scarified spots of each monkey and kept in place there for two hours by means of the device already mentioned.

One of the monkeys forty-six days after developed a slightly

infiltrated spot which slowly enlarged into a frambætic nodule covered by a thick crust; the microscopical examination of films taken from this nodule showed the presence of the spirochæte pertenuis. In another monkey, sixty-seven days after inoculation, three tiny papules developed at the place of inoculation; they soon fused together into an infiltrated mass covered by a thick crust. Films made from scrapings of the lesion contained the spirochæte pertenuis.

The remaining five monkeys so far (March 15, 1907) have given negative results.

#### RESULTS OF THE INVESTIGATION

1. Monkeys are susceptible to yaws. The skin eruption in the monkeys I have experimented with (*Semno. pria.*, *Mac. pil.*) is, as a rule, localized to the seat of inoculation, but the infection is general, as is proved by the presence of the spirochæte pertenuis in the spleen and lymphatic glands; these experiments confirm the results obtained by Neisser and his co-workers.

2. The extract of yaws materials from which the spirochæte pertenuis has been removed by filtration becomes inert.

3. The extract of yaws material containing the spirochæte pertenuis, but, so far as our present methods of investigation permit us to say, no other germ, is infective to monkeys.

4. The inoculation of blood of the general circulation and spleen blood taken from yaws patients into monkeys, may give positive results.

5. The inoculation of the cerebro-spinal fluid of yaws patients is negative.

6. Monkeys successfully inoculated with yaws do not thereby become immune for syphilis.

7. Monkeys successfully inoculated for syphilis do not thereby become immune for yaws.

8. By means of the Bordet-Gengou reaction, it is possible to detect specific yaws antibodies and antigen.

9. Yaws antibodies and antigen are different from syphilitic antibodies and antigen.

10. The presence of the spirochæte pertenuis in monkeys experimentally inoculated, as well as in yaws patients, is practically constant in the unbroken eruptive elements. It is frequent in the spleen and lymphatic glands.

11. Yaws is generally conveyed by actual contact, but under



certain circumstances it may be conveyed by flies, and possibly by other insects.

#### PREDISPOSING CAUSES

Dirt and insanitation favor to a certain extent the development and spreading of yaws as well as any other infectious disease; the malady is extremely rare among Europeans and better class natives who live in good sanitary surroundings, while it is very common among villagers and low-caste natives who live in uncleanly and overcrowded huts. Sex does not exercise any influence, nor does age to a great extent, though the disease is somewhat more frequently met with in children and young people.

Food is mentioned by some Ceylon native practitioners as a very important predisposing cause; some inculcate a sort of fish called *balla malu*, others a fruit known as *rattadel* (breadfruit) and a kind of grain known as *kurakkann* (nutcherry).

#### DIFFERENTIAL DIAGNOSIS

*Verruga Peruviana*.—This disease is strictly limited to certain valleys of the Andes at an elevation of from 3,000 to 10,000 feet. It is far more mortal than yaws, the mortality rising to thirty and forty per cent. It is often accompanied by severe fever of long duration; the eruptive elements of *verruca peruviana* often attack the various mucosæ and bleed with great facility.

*Bubas*.—In Brazil and other South American countries, framboesia is known under the name of bubas. A few authors (Breda) are of the opinion that bubas is a different disease from framboesia. Rivas, after a complete investigation of the disease, has come to the conclusion that bubas is identical with yaws, and that it is caused by the same organism, viz., the *spirochæte pertenuis*.

*Syphilis*.—The theory according to which yaws is a form of syphilis has now only an historical interest. The results of experimental investigations on yaws and syphilis prove clearly that the two diseases are different, inasmuch as:

1. Monkeys successfully inoculated with yaws do not thereby become immune for syphilis, and vice versa.
2. The yaws antigen and antibodies have been proved to be different from syphilis antigen and antibodies.

Syphilis is practically pandemic; yaws, on the other hand, is localized to some parts of the tropics. Yaws is extremely common in Ceylon, extremely rare in India. Syphilis is common in both countries. In Samoa, according to Turner, syphilis was unknown

up to at least 1880, while yaws has been endemic there ever since the group was discovered. In Fiji, too, up to a few years ago, syphilis was not present, while yaws was almost universal. Daniels has made the interesting observation that in British Guiana yaws of late years has disappeared, while syphilis is still rampant. As regards clinical features, yaws presents the following symptoms in contrast to syphilis: primary lesion generally extra-genital, principal type of eruption a papule which proliferates into a papillomatous growth; extremely well-marked pruritus.

The histo-pathology of yaws and syphilis, as pointed out by Macleod, Unna, etc., is somewhat different; in yaws the proliferative changes of the epidermis are much more marked, the yaws granulomata present a more diffuse plasma-cell infiltration, and their blood vessels have no tendency to thickening; naturally these differential histological details must be considered collectively, as there is no individual histological character which, exceptionally, might not be present both in syphilis and yaws.

#### PROGNOSIS OF YAWS

The prognosis is not serious *quoad vitam*. In Ceylon, in 1905, 3,535 cases were treated, with 25 deaths; in 1904, out of 3,591 cases, 16 died; in 1903, out of 3,254 cases 10 only died. The prognosis is much more serious in children than in adults.

When the disease ends fatally it is generally due to the ulcerated lesions becoming phagadenic, and to septicæmic and pyæmic processes. Though frambæsia rarely terminates in death, its long duration and great contagiousness make it a serious complaint. The patients suffering from it are not able to attend to their work; epidemics of yaws, therefore, acquire great importance in plantations of tea, sugar, etc., as they greatly reduce the supply of labor.

*Prevention of yaws.*—The slightest abrasions of the skin should be taken care of and properly treated with antiseptics in countries where yaws is endemic. The yaws patients should be prevented from mixing with the rest of the population, and should be isolated in special hospitals till the disease is cured; their huts and belongings should be thoroughly disinfected.

#### TREATMENT

The natives treat the disease in various ways; in Samoa the patient is rubbed down with sand and washed in the sea, and then the yaws are scraped with a shell. In the West Indies boiled and

beaten-up leaves of the "physic nut" are applied, or powdered alum and sulphur used.

In Ceylon, the *vederellas* (native doctors) apply concoctions of various herbs, and give decoctions of sarsaparilla and other roots. They use also mercury disguised in various ways. The majority of European practitioners use mercury and potassium iodide; others affirm these drugs to be quite useless, and believe that cleanliness and good and abundant food are quite sufficient to bring about a cure.

In the Colombo Clinic for Tropical Diseases I have made some experiments on the various treatments, and I have convinced myself that the potassium iodide treatment is the most effective of all. I do not deny that some mild case may recover spontaneously, but this is certainly the exception, not the rule. I kept, purposely, four typical cases of frambœsia without any treatment for a certain time; one remained stationary, the other three became worse and worse. In one of these—a woman—I had, for humanity's sake, to give up the experiment after four weeks, numerous large fungoid ulcerations having developed. The symptom of which she complained the most, and for which she was continually begging some remedy, was the unbearable pruritus. As soon as the potassium iodide was administered this symptom decreased remarkably in intensity, and finally disappeared, the eruption also getting better.

The potassium iodide should be given in large doses (at least three to four grms. daily); I have little doubt that many reported failures of the treatment are due to the insufficient quantity of iodide administered, though occasionally cases are met with refractory to potassium iodide or to any other treatment. The yaws patients bear large doses well; when severe symptoms of iodism set in, the doses should be temporarily decreased or the treatment may be stopped altogether for a few days. Mercury is useful in many cases, especially in children, but it is as a rule less efficient than the iodides.

Local treatment consists chiefly in keeping the skin scrupulously clean, washing the eruption twice daily with a perchloride of mercury solution (1 to 1000) which greatly allays the itching. The ulcerated lesions may be dusted with iodoform, boracic acid, etc. Mercury ointments may be beneficial, but in my experience are not sufficient to hinder secondary pyogenic infections.

Caustics are not called for unless the ulcers become phagadenic; in such cases pure carbolic acid is best. Though the external treatment may be useful, one must bear in mind that it is not, as a rule, sufficient alone to cure the disease.

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## NOTE ON A PALLIATIVE TREATMENT OF ELEPHANTIASIS

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**I**N elephantiasis, as shown by the histological researches of Crocker, Virchow, Unna, and others, the subcutaneous tissue is enormously hypertrophied from increase of fibrous tissue in various stages of development; most of it being in fibrous bands and networks, while other portions are gelatiniform with fine fibers, numerous nuclei and cells. Given these anatomical features of the disease, I thought that thiosinamin, which has been used by Hebra and others with success in cases of benign fibrous tumours, scars, etc., might be of some use in the treatment of elephantiasis, especially in cases of old standing.

As injections of thiosinamin are very painful, I have always used Fibrolysin (Merck), which is a water soluble combination of thiosinamin with sodium salicylate, and can be obtained in sterile glass ampullae, each containing 2cc. of liquid—corresponding to 0.2 grs. of thiosinamin.

*Method of treatment.*—Before beginning the injections I keep the patient in complete rest in bed for a week, bandaging the affected parts with flannel bandages, or india rubber bandages, and massaging them regularly twice daily. After these manipulations the affected parts do not show much improvement as regards size, but become much softer, and thus the injections are made with much more facility. I make the injections in various parts of the affected regions, using the ordinary antiseptic precautions. I use an antitoxin syringe supplied with a strong needle. A sterile pad of gauze is applied to the place of the injection and the part is firmly bandaged. The injections are almost painless; after two or three hours there may be a little local pain, and the following day the part may feel harder than before, but in the successful cases, after two or three days, the spot where the injection was made and the parts surrounding it become much softer. As regards dosage, I generally inoculate 2cc. of fibrolysin every day or every other day according to the features of the case, for about a month; then I stop the injections for a week, during which time I continue the

use of india rubber bandages, or begin it if I have been using ordinary bandages hitherto. This india rubber bandaging is most useful in cases of verrucosa elephantiasis; it has no action on the deep lesions of the disease, but it renders the skin much smoother, the hard verrucose-like projections disappearing or becoming smaller. After a week or ten days a second course of thirty or more injections is given; then again a week's rest with rubber bandaging, followed, when necessary, by another course of injections.

After this treatment the affected parts—in successful cases—are of much smaller size; the skin becomes softer, elastic, and can be pinched up in folds; the enlargement of the bones, however, so frequently found, does not decrease. After the treatment is over I advise the regular wearing of puttees or elastic stockings; if this precaution is not taken, in a few days the affected parts again become enlarged; it is to be noted, however, that this enlargement is due, apparently, simply to an œdematous infiltration—as a day or two of rest and proper bandaging are sufficient to make the swelling disappear.

To remove the superfluous skin which remains after most of the subcutaneous tissue has been absorbed, and which facilitates the œdematous infiltration, I have suggested, when the disease affects the legs, the removal of long elliptical strips of skin, stitching up together the margins of the wounds; this would not be practicable before the medical treatment, as the skin being enormously thickened and inelastic the coaptation of the opposed surfaces could not be obtained.

I have not observed any serious symptoms due to the thiosinamin: on one occasion a patient after the injection of a double dose (4cc. fibrolysin) complained of severe frontal headache, slight nausea, and general malaise which lasted for a few hours.

CASE I. *Elephantiasis verrucosa of the right leg.*—Ganegada Singhappu, Singhalese lad of eighteen years of age; admitted to the clinic June 2, 1907. First symptoms of the disease appeared twelve years ago, when he suffered from repeated attacks of fever accompanied by painful temporary swelling of the right leg. Later on the enlargement of the leg became permanent, increasing gradually to such an extent that the patient had to give up his work; he was an indoor servant.

At the time of admission the whole limb below the knee was greatly enlarged, the skin being thickened, hard, and rough; on the dorsum of the foot and toes numerous horny prominences

were present. The limb measured round the ankle  $23\frac{1}{2}$  inches; round the calf,  $25\frac{1}{2}$  inches; the inguinal glands were not enlarged, the scrotum and the left leg were not affected.

No filaria was found in the blood.

The patient was first kept in bed for two weeks with the right leg slightly elevated and tightly bandaged with flannel bandage. Massaging was done twice daily. At the end of the two weeks the parts were slightly softer, but the dimensions of the leg were practically the same. The thiosinamin treatment was then started, using the precautions already mentioned.

The patient received altogether sixty-two injections; during the last period of treatment the limb was very tightly bandaged for one hour three times daily, with a Martin rubber bandage.

At the end of the course of injections the condition of the affected leg was strikingly improved; the circumference round the ankle being reduced to 9 inches; round the calf to 12 inches. Moreover the skin had become soft and of almost normal elasticity.

The patient, finding himself so much improved, able to walk easily—whereas when admitted he could scarcely move without help—asked to be allowed to leave the clinic for a short time as he had some business to transact in the village. I told him to use a flannel bandage continuously and to return to the clinic at the earliest date. He came back two weeks later, confessing that he had never used the bandages given to him. The lower part of the leg and foot were much enlarged (circumference round the ankle 12 inches), œdematous, soft. After twenty-four hours of complete rest in bed and rubber bandaging, the swelling disappeared and the measurements of the limb gave the same results as when he left the clinic.

The patient remained in the clinic; he was not given any more thiosinamin injections; he was allowed to walk; for one hour in the evening and one hour in the morning the use of rubber bandages was continued regularly; the limb did not enlarge. A short time ago I suggested that long elliptical strips of the redundant skin should be removed, and I asked Dr. Paul, surgeon to the General Hospital, to perform the operation. Dr. Paul very kindly consented and on July 24, 1907, the operation was performed. The patient was put under chloroform and an elliptical portion of the skin and subcutaneous tissue was removed; the maximum longitudinal diameter of the portion of skin removed was 11 inches; the maximum transverse diameter  $3\frac{1}{2}$  inches. The edges of the wound were brought in contact by means of an interrupted suture.

Since the operation the patient has complained for three days of some local pain; no fever. The stitches have not yet been removed.

CASE 2. *Elephantiasis verrucosa of the right leg.*—The patient—a private case—consulted me in October, 1906. He was suffering from elephantiasis of the right thigh, leg, and foot, of twenty years' duration. The skin of the lower part of the leg and foot were extremely hard, inelastic, and covered with numerous small wart-like protuberances.

*Measurements:* Thigh, 25 inches; calf, 27 inches; ankle,  $24\frac{1}{2}$  inches. The patient underwent a treatment of ninety thiosinamin injections combined with complete rest in bed, and the use of flannel bandages at first, and india rubber bandages later. The case improved greatly, the skin becoming softer, more elastic, and much smoother. The circumference round the thigh was reduced to 21 inches; round the calf to 16 inches; round the ankle to  $14\frac{1}{2}$ . The patient was able to walk with much greater ease.

I have seen the patient again recently; nearly five months after the injections were stopped: the dimensions of the affected limb now are: thigh, 22 inches; calf,  $17\frac{1}{2}$  inches; ankle,  $16\frac{1}{2}$  inches. The patient, following my instructions, has been wearing puttees, and has continued regularly the use of rubber bandaging twice daily for an hour. He states that if he stops the bandaging and the wearing of puttees even for two or three days, the leg becomes swollen and œdematous; the swelling disappears, however, after a few hours' rest and bandaging.

CASE 3. *Elephantiasis of the left leg.*—The patient—a private case from India—had elephantiasis of fifteen years' duration localized to the lower part of the left leg and foot. He underwent a course of fifty-six thiosinamin injections, combined with rest, massage, and the use of rubber bandages. The improvement was very slight; the skin became somewhat smoother, but the dimensions of the affected parts remained practically the same. I think that rest, massage, and bandaging alone, without the injections, would have induced the same improvement.

CASE 4. *Elephantiasis of the left leg.*—Singhalese woman; fifty-six years of age; admitted to the clinic April 2, 1907. The disease is of fifteen years' standing and is localized to the lower two-thirds of the left leg and to the foot, the skin thick and inelastic, but not so rough as in the other cases. Circumference round the ankle 19 inches. The woman was kept in bed for ten days and



the parts were bandaged with flannel bandages; skin softer, but dimensions of the limb practically unchanged. I then began giving the thiosinamin injections. She had thirty-five injections and she then left the clinic, wishing to visit her family, in a distant village. She was much better, the dimensions of the limb round the ankle being 11 inches. When the patient was admitted to the clinic she could not move her toes; on leaving such movements were easily made.

CASE 5. Bennet Gregory—Singhalese boy æt. ten. Admitted to the clinic on June 25, 1907. Three years ago the patient began suffering from attacks of fever with contemporary swelling of the left leg and lymphatic inguinal glands of the left side. On admission the left leg and foot were greatly enlarged, the skin being thick and hard but with a smooth surface. Lymphatic inguinal glands of the left side were slightly enlarged and hard.

The measurements were as follows: Round the ankle, 12 inches. Treatment was begun on July 28, 1907. He received twenty-five injections and the limb was regularly tightly bandaged with flannel bandages, and for one hour every other day with rubber bandages.

On July 23 the injections were discontinued; they were resumed on the 29th of the same month. During the interval only massage and the use of india rubber and flannel bandages was continued.

After the first twelve injections a distinct improvement was noticeable, the parts becoming softer and the size of the limb smaller. On the 15th and 16th of July, however, the affected part again became enlarged and very hard, though there was no fever. This condition lasted for three days.

## THE NEW YORK DERMATOLOGICAL SOCIETY.

354TH REGULAR MEETING, JANUARY 28TH, 1908.

DR. E. B. BRONSON, PRESIDENT, in the Chair.

### Case of Lupus Erythematosus of Nose Cured by Liquid Air. Presented by DR. DADE.

The patient a woman 35 years old. When she first presented herself for treatment the lesion extended over the entire nose. Lesions are still in the scalp, to some extent. The patient was presented to show the excellent cosmetic results obtained by the use of liquid air. She had been treated for a year by other methods, with no result, but under the liquid air every vestige of the lesion has disappeared. The last application was made four months ago, eight applications in all having been made in going over the entire area, no two places having been gone over twice. This is one of the cases shown last autumn at the Dermatological Congress.

DR. WHITEHOUSE said that in cases where the scars were deep, efforts had often been made to cure with one very severe application. Like other potent caustics, if the liquid air is used a number of times with light applications, it yields a good result. It is four months now since the last application, and the cure seems to be permanent.

DR. FOX said that equally good or even better results can be obtained in lupus erythematosus by the use of the curette. The choice is simply as to whether one method is more troublesome or more painful than the other. There is a difference of testimony from patients, as to their preference for the use of liquid air or the curette. In one case shown at the International Congress the whole cheek was left perfectly smooth and with a more delicate skin than the patient had before. He had been treated with both the liquid air and the curette, and his preference was decidedly in favor of the curette as being less painful. Though there is no doubt as to the good results obtained with the liquid air, Dr. Fox was inclined to believe that the old method with the curette beginning at the edge of the patch and scraping toward the center was to be preferred. By applying carbolic acid, which anaesthetizes the parts to a considerable degree, the curette can be used over a large area, and ordinarily there is nothing left but a few scaly patches which can be removed subsequently without much pain.

DR. PIFFARD agreed with Dr. Fox that the curette is better than the liquid air and the result is equally good. He always applies the actual cautery afterward, and the cosmetic results are perfectly satisfactory, though you must destroy all the diseased tissue, as in lupus vulgaris. He had always believed it was a tuberculide, but the bacillus has rarely been found, though some claim to have found it.

DR. FOX suggested that some of those present, when they next have a case of lupus erythematosus on both cheeks or patches near each other, should try the liquid air on one and apply pure carbolic acid to the other, following it with the use of the curette beginning at the edge, and note the result of the two methods of treatment. He had used nitrate of silver as Dr. Piffard uses the

cautery or chloride of zinc, but found this to be attended with severe pain. If pure carbohc acid is used freely with the curetting, the pain is very slight, and none of his patients have objected to it.

DR. ELLIOT said that he had seen lupus erythematosus get well under all kinds of treatment—lotio alba, mercurial plaster, scraping, cautery, constant application of absolute alcohol, trichloracetic acid, etc. It gets well under almost anything at times, but all cases do not get well under the same thing. He has at present a case in which the liquid air was applied thoroughly, with no effect, and the patient has improved under glacial acetic acid. Pure carbohc acid was tried on her also, but with no effect. Some will get well no matter what is done, and many will not.

DR. JOHNSTON said that frequently it can be handled only with difficulty while in a state of progression. The best thing then is to use the least irritating applications; a boric acid wet dressing may irritate. The subacute or chronic disease may be stimulated by any means and the resultant acute inflammation checked at any stage. The choice of means depends on the operator and is a matter of indifference except so far as his preference goes. Nitrate of silver, cautery, curettage, liquid air have no specificity.

DR. PIFFARD said that much of the success of one man is due to the personal equation. He would not have the good result with liquid air that Dr. Dade has secured, and doubtless Dr. Dade would not secure as good a result with the cautery as he has, but that certainly is a good method, and in Laredde's Journal it is spoken of as the method of election and is attributed to Brocq, although he himself had published it in '77, and had insisted upon the actual cautery after the scraping. For a small patch he prefers the high frequency spark to anything else, but this method of treatment was not known 30 years ago. With the high frequency spark one can cure a small patch in a fraction of a second.

DR. DADE, as Dr. Jackson says, results such as this case show are what we expect and get from the use of liquid air in the treatment of erythematosus lupus at the Vanderbilt clinic. It is generally conceded by those who have seen very much of the *fixed* variety of erythematosus lupus that there is no more obstinate form of disease, and by those who have used it in the treatment of this *fixed* form of erythematosus lupus that nothing, from the patient's standpoint, gives such good results as does liquid air, as Dr. Mewborn says it is the treatment *par excellence* for this form of erythematosus lupus.

#### Anaesthetic Leprosy. Presented by Dr. R. J. E. Scott, New York.

The patient a young man from the West Indies, presented himself for diagnosis and treatment three months ago. Had been under the care of his family physician for four years. The lesions first appeared on the abdomen, then on the thighs, buttocks, and arms. They have disappeared and returned, with the exception of the one on the abdomen which has remained constant. No diagnosis of the condition was made, and the boy knows nothing of his condition, nor do his parents yet. It is very important that he should have no clue as to the character of the disease. At first the patch appeared yellow, then grew darker. The color seemed to disappear from the center of the patch and go to the borders. Dr. Bronson has seen the case and found the ulnar nerve enlarged. The boy has headaches, but no illness of any kind. If it were not for the present condition he would be perfectly healthy. In answer to a question Dr. Scott said that the first lesion appeared four years ago. The members present all agreed with the diagnosis.



DR. FOX said that these cases with rings are distinctly different from the tubercular form. He had once seen a case of an Englishman, a magnificent specimen of a man, who had been in the tropics. He was seemingly in perfect health, but his body was covered with these characteristic rings accompanied with anaesthesia, which made the diagnosis beyond doubt.

DR. BRONSON called attention to an observation of the physicians in Trinidad, where he had visited the large leprosary a year ago, that at its inception lepra was pretty regularly of the anaesthetic type, the cutaneous or tubercular form being a subsequent phase of the disease. The type commonly met with here was the "mixed," and the case now presented was interesting as being a comparatively recent one and of the pure anaesthetic type.

**Case for Diagnosis. Possible Mediastinal Tumor?** Presented by DR. MEWBORN.

The patient was a man 63 years old. He was first shown before the Society in March, 1907. He then had a gumma of the tongue, which cleared up under mercury injections.

Since a month he has developed this swollen condition of the neck, with pressure on the venous circulation of the face and neck. If the patient lies down his face and neck become cyanosed, livid, and his breathing is interfered with, although there is no trouble with his heart or lungs. There is, however, a new growth of some sort at the upper part of the thoracic cavity which presses on the superior vena cava. With his previous specific history, this aroused the suspicion that it might be in the nature of a gumma. If so, the case is interesting from the long period intervening between the contraction of the primary lesion (over 40 years). Fournier speaks of a gumma under the clavicle, pressing upon the subclavian artery. It is a year since he first applied for treatment, and he has not reported since the clearing up of the first condition. There has not yet been an opportunity to give him a thorough examination.

DR. WHITEHOUSE said that in view of the man's undoubted specific history, even granting that he has an aneurism now, it was doubtless due to specific disease of the walls of the artery; though he were put on antiluetic treatment the prognosis would certainly be very grave.

DR. ELLIOT said that judging from the enlargement of the veins, the dyspnoea and the cyanotic condition when lying down, he was more inclined to believe in the existence of an aneurism than any other lesion.

DR. KLOTZ recommended giving specific treatment, as that seemed the only thing that could be done.

DR. MEWBORN said that he had presented the case with very little examination, for he had not seen him since a year ago when he had presented him before the Society. He could not agree with Dr. Elliot about hearing a bruit in this case, and was inclined to suspect something in the nature of a neoplastic tertiary formation, which seems to obstruct the superior vena cava, for it obstructs the circulation on both sides of the neck.

**Patient Showing Three Distinct Skin Affections.** Presented by DR. JACKSON for DR. FORDYCE.

William S., aged 28 years. Four years ago he sustained a frac-



ture of the lower jaw. The scar in the skin is the result of an operation to remove necrosed bone. Diagnosis: Alopecia areata of three months' duration; a late grouped nodular syphilide on the back of the neck and right forearm of three months' duration; Lichen hypertrophicus of the leg. The case is interesting because of these three distinct skin affections.

DR. WHITEHOUSE said that the man had undoubted hypertrophic lichen planus and syphilis. The question as to whether he had only these two diseases or whether there was also a third present—a true alopecia areata. He was rather inclined to think there were only two conditions present, for though in this stage of syphilis an alopecia of this type is not usual, an alopecia almost indistinguishable from alopecia areata is occasionally observed in late syphilis; he was inclined to regard it as a part of the specific process. He has a case now of late syphilis with spots of alopecia developing behind the ear and in one or two places on the scalp, which have all the clinical appearances of patches of true alopecia areata.

DR. JACKSON said that the question seemed to be whether the disease was a true alopecia areata, or an alopecia areata-like condition due to syphilis. He had seen recently an exactly similar condition of the scalp in a man who had syphilis. The areas are not quite so round or oval such as is seen in typical alopecia areata. He believed that it was alopecia areata occurring in a syphilitic subject, and not a syphilitic alopecia.

DR. FOX was inclined to think that the lichen planus on the leg was as likely to be the result of syphilis as the alopecia on the head. He agreed with Dr. Jackson that where it follows papular lesions on the scalp it is syphilitic, but he hesitated to regard this case as of syphilitic origin, although appearing on a syphilitic subject. He did not see that there was anything characteristic in the lesion which would lead to a diagnosis of syphilis if the patient had not given a history of syphilis.

DR. DADE said that he failed to find evidence in this case of any preceding lesions that would have caused the loss of the hair—there was no atrophy or scars such as would have followed lesions of the so-called tertiary stage of syphilis which the present eruption on the body would show this patient to be in. The characteristic and diagnostic "motheaten" appearance of the hair in early syphilis is preceded by an erythematous lesion of the scalp coincident with the roseola of the body, but there was no evidence of any lesion of a luetic nature having preceded the condition here. He would take the case to be one of alopecia areata.

#### **Multiple Sarcomatosis Cutis. Presented by DR. DADE.**

The patient, a Russian sailor, 25 years of age, has been in this country more or less for the past ten years. Twenty months ago he first noticed that his legs began to swell; soon after this the tumors began to appear. Starting on the feet and hands they have increased steadily in number on extremities. He has noticed that some of the tumors have disappeared. Some few weeks ago had an attack of erysipelas of the left leg from which he is now convalescing at Bellevue Hospital. Patient presents on the extremities a multiplicity of sessile tumors varying in size from a pin-head to a kidney-bean and in color from a light café au lait in the smallest tumors—many of the very smallest varying but little from the normal color of the skin to a reddish brown in the largest. The smallest tumors are high up on the thighs

and upper arms, growing progressively larger as they approach the feet and hands. The trunk and face are quite free of lesions. The glands in the groins and axillæ are very much enlarged. There are no hæmorrhagic areas or plaques of induration, the intervening skin between the tumors being normal. The left leg below the knee is considerably enlarged. Notwithstanding the absence of the hæmorrhagic areas and induration, which are so characteristic of idiopathic 'multiple hæmorrhagic sarcoma of the Kaposi type, it was with the idea of determining whether this still might not be a case of this disease *starting* with the tumor formation that the patient is presented. The slide here under the microscope was made by Dr. Norris, chief of the Bellevue Hospital pathological laboratory, and would bear out this diagnosis. The slide is side by side with another made some time ago by him from a classic case of the disease and the structure in both is identical, the latter specimen showing the more pigment.

DR. ELLIOT said that while it might be a typical multiple hæmorrhagic sarcoma he would hesitate about making a positive diagnosis until after microscopic examination, for the lesions did not bear any resemblance to any multiple sarcoma that he had ever seen. They were not deep in the corium. Take a single lesion and it was like an ordinary pigmental mole. It had not the denseness that you see in such cases, neither was it hæmorrhagic, and he felt that only the microscope would establish positively the diagnosis.

DR. JACKSON said that he had seen only two or three cases of idiopathic multiple hæmorrhagic sarcoma. This case did not look like those he had seen. In them the lesions were raised, firmer, and of a markedly blue or purple color. There was also much more diffused thickening of the skin. In the case before us the individual lesions have a strong resemblance to pigmented warts. He agreed in the diagnosis of multiple non-pigmented sarcoma.

DR. JOHNSTON said that he had seen the case previously and on clinical and microscopical grounds would unhesitatingly make a diagnosis of multiple hæmorrhagic sarcoma. Sections of early tumors show besides fibroblast proliferation and dilated blood spaces, evidence of hæmorrhage in the form of the golden granules of hæmosiderin. A large part of the pigment disappears in later lesions. It is out of the question to erect on a histological basis like this a new clinical type because patchy infiltration is absent and the assertion of primary hæmorrhage is not supported in the case. It is impossible for the hæmorrhage to be primary—it must follow on the dilation and new formation of blood spaces. The general adenopathy was no doubt due to diffuse exfoliative dermatitis present some weeks ago.

### Two Cases of Lupus Erythematosus.

Presented by DR. JACKSON for DR. FORDYCE.

Maggie Q., aged 44. Lupus erythematosus of the nose and vermilion borders of the lips, of two years' duration. Numerous circular patches of lupus erythematosus on the backs of both hands, which the patient states are of about three weeks' duration. She has not menstruated for two years. Has been much troubled with headache and flushing of the face, and states that she has had chills and fever.

Mrs. F., aged 45. Born in Russia. Diagnosis: Lupus erythematosus of the nose of unusual type. The depressed scars present over the

bridge and sides of the nose, the patient's daughter states, were caused by some caustic application. The lesion shows a considerable amount of infiltration but little scaling. The process is of four years' duration. There is present a small ulcer of the septum just inside the left nostril.

DR. MEWBORN thought the second case was specific in character. The depression in the nose indicating loss of tissue together with the appearance of lesion gave one the impression of a late syphilide.

DR. ELLIOT agreed with Dr. Mewborn, as did several other members.

DR. WHITEHOUSE said that the case made the same impression upon him, but that as Dr. Fordyce was not present it was not known to what treatment the case had been subjected. It looks as though it had had severe treatment, which might have influenced its appearance. It certainly looked specific.

## CHICAGO DERMATOLOGICAL SOCIETY.

MEETING OF DECEMBER 27, 1907.

DR. FRANK HUGH MONTGOMERY, Chairman.

### Case of Cutaneous Blastomycosis with Possible Systemic Involvement.

Presented by DR. HYDE.

The patient was a male aged 41 years, and the present disease has existed one year. In the past personal history a fairly good description of syphilis was given. For the past several months the patient has been ill with a generalized infection of some sort which has been called "pneumonia," "malaria," and other disorders. He has irregular attacks of chills and fever at which time he is jaundiced. At present he is rather pale, has lost some weight, is weak, and feels badly. The liver shows enlargement, and the spleen is plainly palpable. The cutaneous lesions on the forehead are typical of cutaneous blastomycosis. Cultures were successfully made and the organism demonstrated in pus before the society. Future developments in the case will be reported.

### Case of Cutaneous Blastomycosis of the Scalp in an Elderly Patient.

Presented by DR. ORMSBY.

The patient was a man aged 76 years; duration of the disease two years. The disorder began as a "boil" on the scalp and spread over its area. At the present time the entire area of the scalp on one side has been traversed by the disorder and is chiefly composed of scarred tissue, here and there superficial ulceration being present. At the margins of this area the typical advancing border of blastomycosis is visible. The disease is at present advancing across the forehead, having traversed about one-third of the area.

Histological sections were shown in this case which were typical of the disorder.

The organisms were demonstrated in pus and grown in culture. The extensive involvement of the scalp and the age of the patient are the chief points of interest in this case.



**A Case of Giant Urticaria.** Presented by DR. ANTHONY.

The patient was a man 63 years old. He had suffered from constipation for ten years. The present illness had existed for three years and was characterized by attacks of circumscribed œdema, producing one or two tumors, which were egg-sized or larger and which appeared and disappeared in twenty-four hours. These tumors were observed on the legs, scrotum, forehead, and in other locations. The uvula and larynx have frequently been affected and the tongue has been swollen.

On a few occasions there has been a transitory stricture of the œsophagus, of sufficient intensity to prevent deglutition. He has also had attacks of intestinal colic, during which no tumor could be felt in the abdomen, but which were quite probably produced by circumscribed œdema. These attacks of colic alternated with cutaneous tumors. When presented to the Society there was a tumor of the right cheek and œdema of the upper lip. There has never been a generalized pruritus or dermatographia. Occasionally sugar has been present in the urine.

**Case of Tuberculosis Verrucosa Cutis, Closely Resembling Blastomycosis.**

Presented by DR. ORMSBY.

The patient, a woman aged 40 years, presented a lesion on the dorsum of the hand of one year's duration. Two aunts had died of tuberculosis and the patient, previous to the development of the present disorder, nursed a woman who was ill and later died of acute tuberculosis. The disorder on the hand began as a small pustule and spread peripherally. It now occupies an area about  $2\frac{1}{2}$  inches by  $1\frac{3}{4}$  inches.

The points of difference between this and the cases of blastomycosis present were these: There is less of the inflammatory aureola, no miliary abscesses in the border, and the lesion, as a whole, appears more indolent. Much purulent material can be expressed from between the warty and papular prominences in the center of the lesion, and as a whole it appears to be less active than the cases of blastomycosis.

**An Unusual Case of Syphilis.** Presented by DR. HYDE.

The patient was a woman 60 years of age, of the dispensary class, with an indefinite history. She stated that the disorder now under consideration had been present for fifteen years and the lesions occupied an area of the extensor surfaces around both knees. The lesions were of two or three distinct types. Over the left knee were patches of flat, bluish papules forming irregular scaling areas which appeared almost identical with those of lichen planus. Over the right knee extending somewhat also to the posterior surface was a large area, in part occupied by scar tissue, in part by two large tumor-like projections covered with heavy crusts, and in part by several reddish papulo-tubercles, covered with scales. The picture on this knee was not unlike that of sarcoma.

With specific treatment the patient made marked improvement in three weeks.



## SECTION ON DERMATOLOGY.

N. Y. ACADEMY OF MEDICINE.

STATED MEETING, HELD JAN. 7, 1908.

DR. A. R. ROBINSON in the Chair.

**Case of Lichen Ruber. Presented by DR. HOWARD FOX.**

The patient is fifty-six, single, seamstress. Swiss. The eruption first appeared about the naso-genial fold, the temporal regions and knuckles while coming to the United States about twenty-four years ago. She is never entirely free from lesions, being worse in summer and better in winter. Since the first attack she has suffered from many exacerbations which last from three to six months as a rule. Several times she has remained almost entirely well during an entire summer, though as a rule she is worse during the spring and summer. She has taken Fowler's solution on one occasion for seven months continuously without any apparent benefit. She has never received any benefit from local treatment with ointments and lotions. Sea air and bathing seem to have done her the most good. At the beginning of each attack she feels generally weak and nauseated.

The eruption at present is confined chiefly to scaly, dry patches in the scalp, a thickened dry, reddened condition of the face and moderate thickening of skin of the hands with hyperkeratosis of the nails.

**Case of Dermatitis Herpetiformis with Arsenical Neuritis and Pigmentation. Presented by DR. A. SCHUYLER CLARK.**

The patient is a male, 28 years old, born in the United States, single, a clerk by occupation. His family are not very robust as a rule, but possessed of much endurance and have no tuberculosis history. The patient himself was never stout, but always well and wiry, and he has had no severe illness except occasional colds and two attacks of pleurisy. He has always been a hard worker, and was frequently so tired he could not sleep. He gives no history of venereal disease, he is not alcoholic, and he does not use tobacco. Two years ago he noticed little pimples and water blisters on the lumbar regions and buttocks, and later on the legs and arms, involving mostly the flexor surfaces, and soon also appearing on the neck, body and face. There is never any soreness, but at first much itching and burning, which were relieved by the rupture of the vesicles. Eleven months ago he began to use Fowler's solution, gradually working up to 25 minims three times a day, when the eruption was perfectly controlled. Locally, the only application that relieved the patient was the official 50% Ung. Picis Liq., which seemed to cause some inflammatory reaction, with rupture of vesicles and relief. After four months, the patient had abdominal pains and diarrhoea, with puffiness under the eyelids and loss of weight, and

he was forced to reduce the dose to 10 drops. This reduction of the dose was followed by a reappearance of the eruption. After the constitutional symptoms subsided, the dose was again increased, and in two months more the patient realized that his feet and hands were numb, that his ankles were swollen, and that there was some loss of strength in these parts. These symptoms became more pronounced, even in spite of rest, good food, and country air until three months ago the patient was forced to stop his arsenic. The eruption soon then reappeared, and coming under my care, he was treated for one month with intestinal antiseptics and laxatives, and the amount of his proteids reduced, with considerable improvement in his neuritis, but little or no improvement in the eruption and itching. The patient then appeared as a fairly well nourished man, on whose body, extremities, face, and scalp were seen many small papules, vesicles, and scratched points, with a tendency to group, small whitish level scars and small dark pigment spots. The skin of the covered parts was very decidedly pigmented, and that of the penis and scrotum was very dark. He said that this had come on in the past four months, and his complexion was originally very light. His bowels were regular, his tongue clean, his digestion good. Two months ago iron and strychnine was given in considerable doses, with a liberal and even a forced diet. This was followed by improvement in his general health, but little or no alleviation in his disease, and at his request, though he still had some slight numbness and tingling in his hands and feet, one month ago to his tonic treatment was added gradually increasing doses of arsenic, which almost immediately began to control his disease, but unfortunately almost as quickly began to increase his numbness and tingling, and loss of power in his extremities. On the advice of a neurologist, it was decided not to use the arsenic further, because of the liability of producing a more or less permanent injury to his nervous system; and then three weeks ago aspirin was given in generous doses, together with iron, strychnine, forced feeding, and fat. After three weeks the patient appears before you very comfortable and well, and gaining weight and strength, with a gradual improvement in his disease, and without, so far, any exacerbation.

DR. GOTTHEIL remarked that he had seen exactly similar pigmentation in many cases not dermatitis herpetiformis, especially in pediculosis corporis. He did not believe this to be a case of arsenical pigmentation, the only spots resembling that condition being those of the sheath of the penis.

DR. ROBINSON said that the first well marked case he had observed was cured promptly by arsenic. An illustration of this case appeared in the *Journal of Cutaneous and Genito-Urinary Diseases* and also in Dr. Duhring's "Cutaneous Medicine." In subsequent cases he had not been able to obtain such a result. In one very severe case prompt action followed the use of antipyrine and quinine and the same result was obtained in about six subsequent attacks of the disease in this person. He considered that combination the most uniformly reliable in such conditions.

DR. CLARK, closing the discussion, said that the patient had always obtained great relief from large doses of arsenic, but that he had taken such large quantities of the drug, that he was in danger of serious arsenical neuritis if the treatment were continued; he had indeed already shown very severe and persistent symptoms of it. Dr. Clark hoped to get good results from salicin, and mentioned its near relationship to antipyrine and its action as an intestinal antiseptic. He had made 25 spinal injections of cocain without ill effect, and would not hesitate to use it in this case, if necessary. He had tried sulphur ointment, without benefit. He said that the pigmentation was subsequent to the taking of arsenic, the skin having been white before.

#### **A Case of Epithelioma of the Face. Presented by DR. ROBINSON.**

An extensive epithelioma of the face, occupying a large part of the left cheek, including the entire left side of the nose, and extending above the bridge of the nose and into the inner canthus. The treatment was with caustic and Roentgen rays. The patient was previously shown before the New York Dermatological Society (See Vol. 26, page 84 of this journal).

DISCUSSION: Dr. Gottheil asked why the cure should not be completed by the use of the X-ray.

DR. CLARK said that the bone seemed to be involved in two places, and that therefore there was no hope of cure by the X-ray.

In closing Dr. Robinson said he doubted if the bones were already invaded, although he expected necrosis from the treatment. He would not rely upon the X-rays in such a case, preferring caustics, but he believed the X-ray would act much better on the pathological tissue if it was first made more vulnerable by the application of caustics. It was a very unfavorable case, but he believed there was a fair chance for a cure.

#### **An Apparatus for the Rapid and Economic Making of CO<sub>2</sub> Snow.**

Presented by DR. DANA HUBBARD.

The apparatus consists of ordinary plumbing material, a coupling one-half inch to connect on ordinary drum, extending at opposite end to one inch. Into this is screwed a three-inch nipple, one-inch piping, and at distal end is a cap, which is easily screwed on and off nipple.

In the interior is a tubing made of perforated brass metal as thick as heavy paper: this is cut in half and on one side is fitted a piano hinge. Over this metal tube of brass with its hinge is fitted a chamois covering, inside and out, with a single piece left on one end to wrap about tube, and at one end the chamois is left long so as to fold on itself and close distal end of tube.

The chamois covered brass tube is slipped into the nipple and cap put on, then the apparatus is screwed on to drum containing the CO<sub>2</sub> and the gas turned on very slowly. This is continued until the gas escaping from the holes in the nipple is full of white flakes when the inner tube is removed and opened and there is found a tube of snow which can be used as made or remodeled as desired.

## THE PHILADELPHIA DERMATOLOGICAL SOCIETY.

The regular monthly meeting of the Philadelphia Dermatological Society was held at the Polyclinic Hospital, on Tuesday evening, January 21, 1908, at 8:30 o'clock. Dr. M. B. Hartzell, presiding.

**Lichen Planus.** Presented by DR. STELWAGON.

The patient was a baby girl of nine months. The parents stated that the eruption originally started five weeks ago, with a slight outbreak on the dorsal surface of the forearms and the wrists. At the present time the entire cutaneous surface is involved, excepting the palms of the hands and the soles of the feet. The lesions consist of small to large pinhead-sized, flat, irregularly shaped, violaceous, and reddish papules. Some of these papules are umbilicated. Pruritus is marked; the baby is constantly scratching. The lips and the mucous membranes of the mouth are uninvolved. When the eruption was first examined, syphilis, and prurigo were thought of, but as the soles and palms were free, and as the lesions were umbilicated, the above diagnosis was decided by those present as correct. It should be stated that the parents as well as the infant are in robust health.

**Dermatitis Gangraenosa.** Exhibited by DR. DAVIS.

The patient was a male, sixty years of age, anemic, and in poor physical condition. He stated that the disease had existed for only two weeks. On examination three distinct patches were noted: one on the right side of the chest, in the axillary line, over the floating ribs; the second within the umbilicus; and the third, at the junction of the under surface of the penis with the scrotum. The patch on the right side was oval in shape and two inches in diameter. The lesion in and around the umbilicus was dime in size, while that on the scrotum was irregular in shape, and as large as a half-dollar. A patch of the exact dimensions as that on the scrotum developed on the under surface of the penis, where the two touched. At the point on the umbilicus where the previously described lesion touched, another patch with the same characteristics developed. The mode of production of these two other patches shows the extreme auto-inoculability of the lesions. The ulcers are through the whole skin. They are punched out, and are covered with a typical black, foul-smelling crust, from under which exudes a thick, creamy pus. The skin surrounding these lesions shows marked congestion. The smears and cultures which were made showed abundant staphylococci and streptococci. The urine examination was negative for sugar. The patient suffered no pain, although the lesions were somewhat tender on pressure. The process appeared to be due to some virulent agent within the diseased areas. Thorough cauterization was suggested as the best means for arresting the process.



**Mycosis Fungoides.** Presented by DR. HARTZELL.

The patient was a male of fifty-six years, of healthy appearance, and born in Ireland. The most of his life had been spent in the country, being a gardener by training. This disease started six years ago as a generalized erythematous-squamous eczematoid eruption, with marked pruritus. This eruption became progressively worse, accompanied by the development of flat, button-like tumors upon the trunk and the extremities. At the present time the eczematous condition is markedly seen. About a dozen of these button-like lesions are found upon the trunk and extremities, and a few fungating, ulcerating tumors are noted on the left forearm. The patient's disease has been somewhat checked by frequent treatment with the X-rays. This case is to be reported in detail later.

**Annular Syphilis.** Presented by DR. HARTZELL.

The patient was a well built negro of thirty years. This disease had started eight weeks previously, with a chancre on the anterior surface of the penis, just behind the glans. The present eruption started two weeks ago. At this time the entire trunk and the extremities are covered with an abundant macular eruption. The face, however, is almost entirely involved by an annular eruption, the lesions being from split-pea to large pinhead in size, and so numerous that the rings overlap, forming grotesque, mosaic-like figures. The induration of the lesion on the penis can still be felt, and when the foreskin is retracted the characteristic "flop" is noted. All the concomitant signs of syphilis are present.

**Lichen Planus.** Presented by DR. STELWAGON.

The patient was a woman of thirty-nine years, and born in Russia. She was presented at the October meeting of the society, with a generalized lichen planus, of four months' duration. There was scarcely a portion of the cutaneous surface which was not involved, including the face, palms, and soles. The case was shown, to prove the great efficacy of arsenic in certain patients. At the present time there is no lesion on the entire cutaneous surface, and all of the marked pruritus has entirely disappeared. Fowler's solution was the only drug used, no local application being given.

**Chancre of the Lip.** Presented by DR. STOUT.

The patient was a negro of thirty-one years. The lesion started as a small abrasion of the lower lip, five weeks ago. At the present time there is a half-dollar-sized, densely infiltrated, raised, inflammatory, yellowish-red lesion on the center of the lower lip. This lesion is on the vermilion border and also on the skin surface just below, and is covered with a pseudo-membrane. Because of the marked induration, the mucous membrane of the lower lip is drawn somewhat downward. The submaxillary and sublingual glands are markedly enlarged, being from split-pea to hazelnut in size. The throat is somewhat congested, and the patient

complains of pain in the muscles and the joints. The eruption has not as yet appeared, but those present were unanimous as to the diagnosis.

**Tuberculosis Cutis Verrucosa.** Exhibited by DR. HARTZELL.

The patient was a young woman with a healthy family history. This condition originally started two years ago, with small papular lesions on the areas now affected. At the present time there are three distinct patches: one on the middle finger of the left hand, and two on the index finger of the right hand. The patches are dime in size, sharply marginate, raised, verrucous, and studded with numerous minute openings, from which exudes a yellowish-white secretion. One of these lesions is located on the middle finger of the left hand, on the dorsal surface, just at the base of the finger nail; the other two are on the index finger of the right hand, on the dorsal surface, one over the metacarpal-phalangeal articulation, and the other over the articulation of the first and second phalangeal bones. The secretion oozing from the miliary openings was found upon microscopic examination to consist of epithelial cells undergoing fatty degeneration. No history of infection could be obtained. No blastomyces or tubercle bacilli were found in the sections made.

**Folliculitis Decalvans (?)** Presented by DR. SCHAMBERG.

The patient was a female, twelve years of age. This condition had supposedly started three years ago, as a somewhat pustular eruption, the pustules being pierced by hairs. At the present time there are about one-half dozen, split-pea to three-cent-piece sized lesions, on the vertex of the scalp. These patches are scar-like and entirely denuded of hair, being slightly depressed. The scalp surrounding the lesions is noted to be scaly. Several diagnoses were suggested, such as an unusual form of ringworm, favus, and the atropic, scar-like condition following deep-seated ecthyma. So fungus was found upon microscopic examination.

**Verruca of the Tongue.** Presented by DR. SCHAMBERG.

The patient, a woman of twenty-two, had first noticed this condition two years previously. Upon the left side of the anterior surface of the tongue, one inch back of the tip, was located a typical verruca. The base was a small pinhead in size, while the point was slightly smaller. The wart was only slightly raised above the mucous membrane of the tongue. A wart was located on the index finger of the left hand, and another on the left side of the lower lip, just at the place where the verruca on the tongue would touch, in the event of protrusion. The verruca first appeared on the finger, then on the tongue, and finally on the lip. The point was brought out in the discussion, that verrucæ are frequently seen upon the mucous membranes of dogs.

**Atrophy of the Skin, Associated with an Urticarial-like Eruption.**

sented by DR. SCHAMBERG.

This interesting case was exhibited before the November meeting of

the society. At that time the entire face, neck, the upper part of the back, and the shoulders were covered with pin-point to small pinhead sized scars; really minute, non-infiltrated depressions. The skin was pliant and smooth. Minute telangiectases were noted on the shoulders. There was no scaliness or subjective symptoms. The face was somewhat congested, in the shape of a bat's wing. At the present time the conditions remain almost the same as before. The congestion has, however, almost disappeared from the face, and the other lesions are slightly flatter. An urticarial-like eruption has now been added to the other condition; dermatographism is present, angio-neurotic-like swelling, and a wheal formation. No satisfactory diagnosis was arrived at by those present.

**Tinea Sycosis, An Unusual Case of.** Presented by Dr. STELWAGON.

The patient, a healthy male of thirty-six; had first noticed this eruption six months previously. The disease started as small macular patches in the bearded region. These lesions increased in size, until now there are about a dozen hazel- to walnut-sized tumors, upon the chin, bearded region of the neck, the upper lip, and also the vermilion surface of both lips. The tumors are markedly boggy and inflammatory, and some of them have broken down, forming ulcerated areas, with serpigenous borders. No microscopic examination had been made, but clinically the diagnosis was clear. Ringworm attacking the mucous membrane is very unusual, so this case involving the lips is of great interest.

**Leukoplakia followed by Epithelioma.** Presented by Dr. FINCK.

The patient was a male fifty-five years of age. According to the patient, the first white patch was noticed on the lip one year ago. This patch rapidly increased in size until the entire lower lip became involved; the upper lip also being somewhat affected. Six months ago, or six months after the leukoplakia commenced, a pin-point ulceration appeared on the left side of the lower lip. This ulceration has been progressive, until at the present time there is a dime-sized, ulcerated lesion, with a raised, "pearly" border, upon the left side of the lower lip. No patches were found within the mouth. The man stated that he had always been a moderate smoker. Dr. Hartzell stated in the discussion that Butlin mentioned in a recent paper the fact that epithelioma follows leukoplakia in about one-half of the cases. Dr. Schamberg exhibited the case, in the absence of Dr. Finck.

FRANK CROZER KNOWLES, M. D., Reporter.

## MANHATTAN DERMATOLOGICAL SOCIETY

61ST REGULAR MEETING, JUNE 7, 1907.

DR. E. PISKO, Chairman.

**Spastic Cerebral Palsy in a Heredo-Syphilitic Child.** By DR. B. F. OCHS.

Jerome N., 7 years old, healthy at birth, at five months developed an eruption which appeared first on buttocks, then spread over the rest of the body. Eruption persisted for nine months, inunctions were then given and the child got well and remained so for two years. The mother then noticed that the child began to fall and tumble, always to the right. This was followed by convulsions, fever, and in about a week's time the entire right side of the child was paralyzed; with the loss of the powers of speech and locomotion. These conditions have persisted to the present time, but with very little improvement. The child shows all the signs of spastic paralysis, and does not talk. Around the mouth are the characteristic radiating scars. The child has the characteristic notched teeth of the Hutchinsonian type.

In the discussion it was the opinion of most of those present that whilst there were undoubted evidences of the existence of heredo-syphilis, there was not sufficient proof of the dependence thereon of the spinal cord involvement.

**Lupus Vulgaris Incipiens.** By DR. I. P. OBERNDORFER.

Margaret E., aged 4 years, has had since eight months old a lesion on her right cheek, which began as a small pimple. In spite of treatment other similar pimples appeared in the neighborhood of the original lesion. At the present time there is a quarter-of-a-dollar sized group of conglomerate, subcutaneous, soft, brownish tubercles at the spot. No other disease. No tuberculosis in the family.

For treatment Dr. Oulmann suggested the high frequency current applied with the carbon electrode.

DR. GEYSER said, by the direct application of the X-ray, with safety tube, in contact with the skin, the growth could be removed without scarring. The reporter advocated surgical removal as preferable to electrolysis, to any of the chemical caustics, to liquid air, or to the carbon dioxide snow. He proposed to excise the growth.

**Paronychia Syphilitica.** Presented by DR. L. OULMANN.

R. T., male, aged 29 years, had a chancre at Christmas, 1906, followed by usual secondary manifestations. At the present time, patient has mucous patches on tongue, and soft palate and a squamous syphilderm of the palms in addition to the manifestations of and about the nails, for which condition he is presented. The nails have a dull appearance, with transverse ridges; the entire nail appears to be thinned.

DISCUSSION: The general opinion was that the lesions of the nails were



those due to the patient's occupation. Dr. Pisko remarked that in many instances the patients have lesions of their nails but do not pay any attention to them; when patient acquires a syphilitic infection, the condition is then regarded as being due to the infection.

**Epithelioma of the Face, Treated with the Cornell Tube (X-ray), resulting in Improvement.** By DR. A. C. GEYSER.

Mr. A. K., printer, aged 69 years. Nineteen years ago he had a mole cut by a barber. The wound never completely healed, except for a few weeks, bleeds very readily. There is no glandular involvement. Shown for improvement resulting after seven X-ray exposures, direct contact with the Cornell tube, 5-6 minutes at each treatment.

DISCUSSION : Dr. Gottheil, while agreeing with the diagnosis of epithelioma, could not understand why no glandular involvement was not present.

DR. GEYSER said that, in his experience, he has found that glandular involvement in squamous epithelioma was the exception.

**Epithelioma of the Tongue, Treated with the X-ray Without Benefit.** By DR. L. OULMANN.

Mr. T. F., carpenter, aged 54 years. His present complaint dating back two years, began with pain and burning sensation in tongue, and he was at that time advised to have a number of his teeth removed. Six months later he had 11 teeth removed, but the condition did not improve. In January of this year a portion of the diseased area of the tongue was removed for microscopical examination, the wound never healed. On left side of tongue was a small sized hard sensitive swelling; glands now began to enlarge. Patient refusing operation, the X-ray was applied for a period of two months with no result, the mass grew larger and the glandular involvement progressed. Operation was again advised, refused; the exposures were continued; mass is now stationary. Patient has lost no weight. Microscopical examination showed carcinoma.

DISCUSSION : Dr. Geyser advised the use of a tube of high penetrating power, at least two feet away, each exposure lasting from ten to fifteen minutes.

M. B. PAROUNAGIAN, M. D., Secretary.

BOOK REVIEW.

**Traité Élémentaire de Dermatologie Pratique, comprenant les Syphilides cutanées.** By L. BROcq, Médecin de L'Hôpital Saint Louis, Paris. In two volumes, 222 illustrations in text. *Octave Doin, Publisher, Paris, 1907.*

The number of dermatological treatises that have appeared in the last few years is truly colossal. It would seem that after the encyclopaedic "Pratique Dermatologique," edited by Besnier, Brocq and Jacquet, and representing the French School, that no single French author would attempt to cover the ground alone in so exhaustive a manner. It cannot be possible that our conception of

the word elementary could be the same as that of the author. A work of nearly 1700 pages cannot seriously be called elementary. The book is fully up to date and purposely omits references which have been given in the *Pratique* and only gives references to the literature that has appeared since then. In a way the book owes its principal interest to Brocq's theory of cutaneous reactions, and to his graphic or rather "geographic" representations of the intermediary types between the varied groups of dermatoses.

Volume I. is devoted to generalities and to true morbid entities. By morbid entities Brocq wishes to consider cutaneous affections not with special reference to the lesions which, whether regarded clinically or by the microscope, possess no other value than anatomic localization of the eruptive accident; but seeks to classify them according to their etiological cause, such as syphilitic, tubercular, mycotic, parasitic, etc. This group is subject to constant enlargement as our knowledge of etiology becomes more extended.

The second volume is devoted to cutaneous reactions, and, to avoid confusion, cutaneous reaction which are due to known external causes are placed in the first volume as morbid entities. By pure cutaneous reactions Brocq refers to: "A considerable group of dermatoses which seems to us to correspond to morbid states proceeding from the patient himself, or which may be, more or less, considered so in the present state of our knowledge, while awaiting further discoveries."

This by no means indicates that Brocq is going backward to the theory of diatheses, although their existence as modifying the modes of production of cutaneous reactions is not denied. Brocq insists that cutaneous reactions are or may be considered the expression of auto-intoxication.

After all, Brocq's systematization does not help us greatly to understand the cause of these cutaneous reactions—we must interrogate the various organs and their functions as before, but to give the skin manifestations a name we must rely upon the clinical syndrome aided by the histo-anatomical findings. It is still the method of Willan slightly modified by our latest scientific findings. The method of graphic representations of bonds of affinity between widely separated groups seems more apt to confuse than to enlighten the student. It is our natural tendency to approach the symptoms between separate dermatoses; what the logical diagnostician looks for is not what Brocq calls "cas de passage," but strongly differentiated symptoms that will enable us to say it is not this disease with these distinct symptoms, but that disease with a distinct syndrome. These slight points of criticism are entirely overbalanced by the erudition of the work, the masterly spirit of systematization, the unity of carrying out the theory despite a number of diseases included in the cutaneous reactions which in the humble opinion of the reviewer are distinct morbid entities, for example, mycosis fungoides and cancer.

The work is well but not too profusely illustrated by the excellent photographs taken for the most part by Dr. Sottas. The photomicrographs are not so well done.

A. D. M.

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## X-RAY BATHS AND DERMAMETROPATHISM.

BY HERMAN LAWRENCE,

Dermatologist to the Melbourne and St. Vincent's Hospitals, Melbourne, Australia.

Read before the Sixth International Dermatological Congress, New York, Sept. 9-14, 1907.

*X-rays baths.*—What I have termed an X-ray bath, is a method of applying the X-rays so that the skin of the whole body may be exposed to the rays at one time. As shown in the photograph, there are six tubes, connected to six separate coils, each coil has its own break and its own primary current supply. At the present time, I often work coils in series and tubes in series, that is, I work two coils with one primary current, using one break, and I sometimes work two or even three tubes in series connected with a 20-inch coil. But I have not found tubes in series altogether satisfactory. The patient stands with the tubes, three upon either side, and at a distance of twenty inches from each tube. The patient then has four exposures of three minutes each, the patient facing north for first exposure, then south next exposure, and then east and west for the other two exposures. The reason for this order of exposure is that the tubes must be altered as regards distance from the patient, for an antero-posterior exposure, as compared with exposure to each side of the patient. By altering the position of the patient in this way, any unevenness of dosage of the X-rays from the separate tubes is more or less equalized as regards their general effect upon the patient's body.

The patient is undressed and wrapped in a white sheet. A lead foil mask is used to protect the head and there is also lead protection for the genital organs. The patient should stand in a cage made of cane, and a nurse stands by, to rotate the patient at the end of each three minutes' exposure. I operate the bath behind a lead-lined stand with crown glass window. The nurse has similar apparatus for her protection. In children I use only four tubes. As regards dosage, I use radiometer discs in order to watch the

effect of the rays upon them from each tube, but, of course, I do not in any way give a dose such as we use for depilation in ring-worm. I may say that I have treated some 500 cases of skin disease by radiotherapy, and I am of the opinion that where you desire to get big effects by the X-rays in a short time (for in Australia patients will come hundreds of miles and cannot remain for more than a week or two), and in such cases, I think one can get better results by the method of giving several mild exposures, as compared with the method of giving a heavy dose and then waiting to see the result upon the patient's skin.

I am ready to admit the former method requires a good deal of experience upon the part of the operator. And I would not recommend anyone to try the X-ray bath exposure I am now describing unless he thoroughly understands the danger of an over-exposure. One can easily understand that a generalized reaction from an over-exposure, or from too great an accumulation of the X-ray effect upon the skin, could be followed by a fatal result. I myself have worked the method up gradually from the simple tube. I frequently use two sets of two tubes, as in treating two arms or two legs. Here there is a great saving of time, for instead of giving four exposures of ten minutes (if that be about the time required for a certain dose) to each limb, the whole treatment can be carried out in eight minutes if the tubes are placed at the same distance, as when the single tube is applied.

I have used the bath successfully in mycosis fungoides, generalized eczema and psoriasis, obstinate urticaria, pruritus, and in children when lichen urticatus is very troublesome it has been followed by quick relief from symptoms.

I will now briefly relate four cases treated by the bath.

Girl aged eighteen. Mother states her daughter had been to school in Europe for two years; she developed eczema very badly and was under treatment in London for six months. She did not get better and they could not remain away from Australia any longer. On reaching Melbourne she was recommended to consult me *re* having X-ray bath treatment. When I examined her she had a bad catarrhal inflammation of the skin of both arms and legs, also face and trunk slightly affected. I saw by her prescriptions she had had the best of treatment, and I thought in her case I was justified in using the X-ray bath. She had three baths the first two weeks, and then two tube exposures for three weeks, and by this time the eczema



PLATE XX—To Illustrate Dr. Herman Lawrence's Article.





was so subdued I allowed them to return home. Her recovery was complete and there has not been any return of the eczema since.

CASE 2.—Man, age forty-five. Psoriasis for past twenty-five years, has been to Europe upon two occasions for treatment. Treatment relieved him, but he was never quite free of the psoriasis. He said he was sick of trying treatment, as the ointment spoiled his clothes, and for the past two or three years he was content to put up with the psoriasis, merely using olive oil and baths to lessen the scaling nuisance. He was a relative of the girl just mentioned, and said he had come to know if I thought the X-ray bath could be of value in his case. I undertook the case, and in six weeks he was free of the psoriasis. He was so pleased that he continued to have an X-ray bath once a month for some time. However, in spite of treatment, guttate spots used to appear occasionally. To these I applied the radium. I have five specimens of radium, and we used to treat several of these spots at one time. My radium is of high radio-activity, and fifteen minutes was in his case quite sufficient exposure at a time. He was so pleased with result he bought a specimen of radium for himself. It is now two years since I first treated him, and with his specimen of radium he tells me he keeps quite free from any bother with psoriasis. No other treatment was used during the X-ray bath treatment.

CASE 3—Urticaria. Sister of medical man, very bad case, all treatment failed to relieve her, and her health suffered from broken rest. With X-ray baths she was relieved of her trouble in two weeks, and went on a trip for health, which was not good. I have not heard whether she had any relapse of the urticaria. No other treatment was used during the X-ray bath treatment.

CASE 4—Mycosis fungoides. Treatment by X-rays for three weeks, interval of three weeks and then another treatment for two weeks by double tubes. Tumors all resolved. Case only recently treated, so too early for relapse at present.

### DERMAMETROPATHISM.

*Dermametropathism* is a word I have coined, and is meant to express a system of measuring a disease of the skin. The system is based upon the result produced upon the skin by pressure with a smooth instrument, such as a pen-handle. The same instrument must be used and the same amount of pressure applied, as the varying results obtainable in different diseases are compared the one with the other, or the result obtained upon the diseased part of the skin

is compared with that obtained upon the skin which is not diseased. Now if the instrument used be too rough or too smooth, or not applied with a somewhat equal amount of pressure, the varying results obtained as evident to the eye could not be made use of. One must compare the result obtained upon the diseased portion of the skin with that obtained upon the normal skin as produced by similar conditions.

My attention was first drawn to this subject some years ago by a patient stating that she noticed when she scratched herself she produced white lines upon the skin, whereas if her sisters or brothers scratched their skin they produced red lines.

Her case was one of almost universal eczema dating from infancy with marked pruritus and velvety thickening of the skin, being especially so upon the extensor aspects of the limbs.

I then applied the pen-handle to her skin, which was followed by the production of white lines upon the skin. And I then similarly examined the skins of the other members of the family, two older and three younger than herself, and in all of them the pressure with the pen-handle was followed by the production of red lines upon the skin.

I then watched for similar cases of eczema and in four such cases, whose ages varied from twenty years to forty-five years, similar results were obtained on the application of pressure to the skin.

I then noticed and the patients themselves agreed with my observations, namely, that the white lines were more markedly evident and lasted longer when the disease was more exaggerated. I then started to examine all varieties of skin diseases by this method, which I named "skin markings." In a great number of skin diseases so examined, the results obtained did not appear to be of any special interest; but, on the other hand, in a certain number of cases the results obtained seemed to me to be of considerable interest, and so I have taken this opportunity of bringing this subject under your notice. By this method there are seven distinct lines or marks obtainable, and it is by observing the variability of these lines, the different combinations they enter into, and the difference in time that they remain visible that one can apparently make use of them.

No. 1 line, or marking, is produced by drawing with slight pressure a smoothly rounded off pen-handle across the skin. You will notice a white line. Immediate pressure line.

No. 2 line, or marking, is a red line, which usually follows in



a few seconds after No. 1 line. It is about the same width as the end of the instrument or marker used.

No. 3 line is also a red line, but an exaggerated one, being two or three times as broad as the end of the marker applied.

No. 4 line is a red line with a white line upon either side of it.

No. 5 line is a white line, so that in this case one has two white lines, No. 1 line being followed by a white line. It is not a raised line.

No. 6 line is a raised line which follows upon a red line, so that in this case, there is a white line followed by a red line, and then a raised line is produced.

No. 7 is also a raised line, but it follows upon a white line, either No. 1 line or No. 5 line.

These lines or markings are usually much more easily observed upon the trunk than upon the limbs.

Now as these lines or markings vary as regards their quality, and also as regards the time they last, I have placed the + or — sign, before the line or marking, in order to express whether the line or marking is greater or less than the usual marking. For instance, if you draw a pen-handle across the back of the hands when they are red and swollen with the cold, the white line is very marked, and in such a condition one would call it + 1. And as regards the time the marks lasts I have used the same signs, + or —, but placed after the line. For instance, if No. 6 line lasted for forty-five minutes, then the marking would read 6 +. Here the + is equal to forty-five minutes.

*What I contend is that, by this method of clinical observation, which I call "skin marking," that certain markings prognose the chronicity of certain diseases and give warning in some cases of the near onset of a relapse of the disease and that certain markings explain the exaggeration of the symptoms in some individuals, and that probably suitable treatment may be worked out by observing the effect of the markings upon the skin.*

Now for the statement that certain markings explain the exaggeration of the symptoms in some individuals.

Take for instance persons troubled with acne vulgaris. Why is it that, in some cases, there is very little congestion or inflammation around the comedones or plugs of sebaceous matter, while in other cases there is marked exudation and papule formation? I contend that in some cases it is coincidental with an increased irritability of the tissues in the latter subjects, which irritability can

in some cases be calculated or evidenced by this system of skin markings. I have proved this fact in many cases, and will try and explain what I mean.

Two girls, twins, aged sixteen years, were treated by me for bad acne of the face. We will call them A. and B. Case A. marked +1, +3, and case B. marked +1, +3+, +6+. You notice that case B. marks + after 3 and 6+, in addition to the markings of case A. The + after 3 and 6+ represents the increased irritability of the tissues, and is the reason why in these two cases that there is so much more disturbance around the acne plug in case B. And as I will tell you presently when case B. ceased to mark + after 3 and 6+, then the degree of congestion became the same in case B. as in case A. In case A. the papules were not accompanied by so much congestion and inflammation as in case B. Case A. proved far more amenable to treatment than case B. On removing with acne expressor the sebaceous plugs the skin remained practically undisturbed in case A., but in case B. the removal of the sebaceous plug would be followed by a small round lump. So that in case B., besides the increased vasodilatation, you had also a determination of fluid around the sebaceous plug, which formed of course a suitable soil for micro-organisms, and this condition was the cause of case B. having more exaggerated symptoms and being more intractable to treatment than case A.

This difference in these cases lasted for more than twelve months, when I noticed case B. showed much less disturbance around the acne plugs, and also the formation of small lumps (acne urticata) had ceased to be obtainable, and upon marking the skin the mark was +1, +3, as in case A. I do not venture an opinion upon the cause of the increased irritability of the tissues, or the reason for the cessation of the production of line 6+ in case B., but I hold that a certain marking in case B. coexisted with the exaggeration of the symptoms in this case.

I have several exaggerated cases of acne vulgaris which have line 6, and in some it is limited to the acne regions. But all severe cases of acne vulgaris do not necessarily have the line 6, but if it is not present, then there is generally the boggy condition of the skin previously described or marked vaso-dilatation, with increased irritability of the sensory nerves to the skin.

*Certain markings prognose the chronicity and advise the near approach of a relapse of the disease.*

What I mean is this, that in certain cases there are certain

markings which are obtainable as long as the disease remains, and more than this, that the markings in some cases advise the near approach of an attack. The marking in the case I will now relate is 1, +5, that is, the immediate pressure line is 1, and it is presently followed by a well-marked white line, which is not a raised line; and when the disease is improving the line or marking alters to 1, —2, —5, which means the marking is becoming more like the normal marking, 1, 2.

The following case illustrates the coincidental presence of the line 1, +5, and fairly generalized eczema occurring during the winter months.

A. G., male, aged seventeen years, with a history of eczema of the trunk, arms, and face, every winter since infancy. When I examined him in June (winter in Australia) he marked 1, + 5 upon all parts of the trunk, face, and arms, with the slightest attempt of vaso-dilatation upon the abdomen. He marked 1, 4 upon the thighs, which were not troubled with eczema. In spite of treatment his eczema proved most troublesome during the winter months, but as summer set in, the eczema cleared up and the markings gradually changed from 1, + 5 to 1, — 2, — 5. I marked his skin in January, and he marked 1, — 2, fairly well all over the chest, back and abdomen, and his eczema had all cleared up. In April of this year his marking relapsed to 1 + 5, and *within three weeks the eczema again appeared.*

What I would draw your attention to more particularly is this, that this patient who more or less had learnt the value of the markings upon the skin consulted me and reported that his markings had become worse, and supposed he was in for a fresh attack of eczema, which actually proved to be correct; that is to say, in his case a marking 1, —2, —5 became 1+5 upon the skin before the inflammation as far as the eye could discern had developed, and before any symptom of irritation was felt. I hold that this marking 1, +5 prognosed the near onset of the attack in this particular case. The patient of course thought he should have been treated as soon as what he called the eczema marking appeared, but there were no symptoms or evidence of the eczema to treat. I think the marking in this case is suggestive as regards the etiology of this form of eczema.

As regards dermametropathism, or measuring the disease by



this method, I would mention the following cases. A case of unilateral hyperidrosis of the face and head, right side. The patient had to continually mop the right side of his face and head, as the sweat kept on accumulating upon these parts. His marking upon the right side of the face was, 1, +3+; here the + after 3 represented twenty-five minutes. The left side marked normally, 1, 2. When examined some two months afterward, the sweating had become much less, and although he still had No. 3 line, it only lasted for ten minutes, and when he gets well of the hyperidrosis the marking upon the right side of his face will apparently become the same as upon the left side.

Urticaria pigmentosum, in three typical cases, the marking has been +1, 7+ upon the spots, and 1, —2 upon the skin between the spots. That is, on marking the spots you get a well marked white pressure line, followed by a raised line, and upon the skin between the spots you get a white line followed by a poor red line. In one of my cases which has been three years under observation, the child's condition has considerably improved, and in this case the marking has likewise altered considerably in the direction of becoming a normal marking. That is, the + after 7 in this child at three years of age was equal to twenty-five minutes; whereas at six years of age the + after 7 was only five minutes; and the amount of redness which may be produced by friction between the spots has likewise markedly increased.

In a man who suffered from acute dermatitis of face and hands, whenever he worked in the tramway factory sheds, the particular timber which affected him being blackwood. Upon this timber being sawn up, the dust flying upon his hands and face would cause an acute dermatitis with much swelling, and he would have to leave off working. For twelve months he was always subject to this dermatitis, and the question arose whether he would not have to change his occupation. During the whole of these twelve months his skin used to give a raised line, urticaria factitia, both during the attacks and between the attacks, when his skin was apparently quite well. But fortunately the skin at last ceased to give a raised line or urticaria factitia, when the pen-handle was pressed upon it. And then the man ceased to suffer from dermatitis due to the blackwood. That is to say, that all the time his skin was in a condition in which urticaria factitia could be produced he was unable to work in the factory sheds without getting an acute dermatitis of the exposed parts. But when the skin ceased to give a raised line upon being



marked then he could work in the blackwood dust without his skin becoming inflamed. After being free from this condition of idiosyncrasy as regards the action of the skin to the blackwood dust for eight months, unfortunately his skin again assumed the condition in which pressure upon it with marker would produce urticaria factitia, and he again became subject to dermatitis caused by the blackwood dust. But, however, I have examined other cases in which patients have been specially subject to dermatitis from certain plants, as in one case due to the *primula obconica*, but in this case there was not any accompanying condition of urticaria factitia.

Mumps.—Alteration of markings due to mumps. In two children, whose markings had been frequently taken during two years, and in whom the markings always remained the same; but when they were attacked by the mumps the markings during the acute stage of the disease were completely altered.

1st case: Boy, aged twelve, markings always a white line followed by a red line, 1, 2. When he got the mumps his marking was a well marked urticaria factitia, a line raised as high as a small pen-handle; as the mumps disappeared his marking returned to its usual or normal condition.

2d case: Girl, aged sixteen, markings always 1, 2 upon trunk and arms and thighs; but upon the face the marking was 1, —5. That is, she marked normally upon the body and limbs, but over the skin of her face there was a white line followed by a feeble white line. When she got the mumps the condition urticaria factitia was produced upon the trunk and limbs where she had had the normal marking, but upon the face the marking 1, —5 changed to 1, +5+, so that upon the face she gave a well-marked white line lasting some minutes. I think in this case the exaggeration of the abnormal marking upon the face, instead of a tendency to the condition of urticaria factitia as upon the trunk, under the influence of mumps, is difficult to understand.

Scleroderma, Morphœa Patches.—In several cases the marking has been 1, 5 over the patch, and 1, 2 over the skin not affected. That is, there has been a white line on pressure followed by a white line, where the skin was affected by the disease, and the skin beyond the patch was not altered from the patient's usual marking. This does not occur in leukoderma, where the marking over the leukodermic patch is always the same as the marking beyond the patch. Of course one would not expect any alteration in the case of leukoderma. The following case illustrates my method: Patient with

sclerodermic patches of only a few months duration. Patches were situated upon the back and chest. Upon marking the skin over the patches, there was a white line followed by a white line. Just immediately beyond the patch there was a white line followed by a poor red line, which later on became a white line, and upon the healthy skin the marking was a white line followed by a red line. In this patient by taking the autogram in full, and comparing it with the autogram at the patient's next visit, which was after an interval of four weeks, I was able to answer the question patients frequently ask, that is, is there an improvement or not in the skin trouble. As far as one could see, or feel, there was not any appreciable alteration in this patient's skin trouble. But on taking the autogram in detail, I was able to form the opinion that the condition was getting worse instead of better, and this prognosis was supported after another two months' interval, when the spread of the sclerodermic patches had become quite apparent to the sight and touch. The patient then remained in town and with a course of massage and other treatment, the autogram improved, and this was followed by evident improvement in the sclerodermic patches. The autograms read as follows:

1st visit (October):

- 1 (8-10 sec.), + 5 (+ = 10 min.) over patch.
- 1 (3-5 sec.), — 2 (5 sec.) — 5 (lasting 3 min.) just beyond patch.
- 1 (10-15 sec.), 2 (lasting 10 min.), general skin marking.

Second visit (November):

- 1 (5-8), + 5 (+ = 12 min.), over patch.
- 1 (2-5 sec.), — 2 (3 = 5 sec.) = 5 (6 min.) just beyond patch.
- 1 (10-15 sec.), 2 (lasting 10 min.) general skin marking.

Third visit (January):

- 1 (5-8 sec.), + 5 (+ = 15 min.) over what is now a much larger patch of scleroderma.
- 1 (3-5 sec.), — 2 (4-5 sec.), — 5 lasting 4 min., over the skin surrounding new patch.
- 1 (10-12 sec.), 2 (lasting about 10 min.), general skin marking.

In this patient the patches were situated upon the trunk of the body and of recent formation. In several chronic cases of scleroderma I have not been able to obtain marking as in the case just related, beyond the white line followed by a white line over the dis-

eased areas, 1, 5. In the case of patient just described she has recovered from her skin trouble and the skin marks practically normal all over. That is:

- 1 (10-12), 2 (lasting about 10 min.) all over the back and chest.

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## FURTHER EXPERIENCE WITH THE WHITE AND BLUE LIGHT OF THE QUARTZ LAMP.

By PROF. ERNST KROMAYER, of Berlin.

### INTRODUCTORY

Through Finsen's epochmaking lifework, light has become a therapeutic agent of the first order. Its universal application was, however, hampered by the high price and the clumsiness of the Finsen apparatus.

I believe I have found in the medicinal quartz lamp a substitute as well as a convenient service of light in place of the Finsen-apparatus, so that phototherapy can now become the routine method of the physician.

The quartz lamp is a mercury-vacuum lamp, made of melted quartz-glass, imbedded in a running waterbath, whose casing of the size of a fist permits of the exit of the light through a quartz window which, like Finsen's compression lens, may be used as a compressorium.

Since my first publication on the quartz lamp, a whole series of papers have been published which, while they in a considerable measure confirm my statements, contain simultaneously a series of justifiable criticisms. I hope to be permitted to discuss these in conjunction with my own further experiences and the improvements which, meanwhile, have been made in the lamp.

1. *Superficial effects of the Quartz Lamp.* The greatly superior superficial effect of the quartz lamp is acknowledged by everybody, including the Finsen institute in Copenhagen <sup>4,5</sup>. Some authors (Busk,<sup>4</sup> Stern<sup>10</sup>) consider the effect too great and apt to give rise to undesirable light necrosis. Although I have

seen a resulting necrosis in only two cases after a raying lasting one hour, the strong superficial action of the quartz lamp seems to me undesirable in cases where a deeper reaction is intended, as in lupus.

This drawback of the lamp can be corrected by the admixture of a methylene blue solution<sup>11, 14, 14a</sup> to the waterbath of the lamp, as a large amount of the outer ultraviolet rays upon which the superficial effect depends is, as I have already shown, absorbed in a manner similar to that in which the heat-rays are, so that the "blue" mercury light contains a selection of those rays which possess a relatively greater penetrating power besides a greater photochemical action.

The spectra which the Quartz Lamp Company has kindly placed at my disposal show these conditions plainly.

By filtration of the light through a blue "ultraviolet" glass plate, such as the Quartz Lamp Company has attached to the raying accessories, which are to be discussed later on, a similar selection of the rays can be obtained.

Bering<sup>6</sup> has proved, experimentally, that the blue mercury light is not quantitatively inferior to the white in the deeper effect, so that it is advantageously applied wherever such deep effects are intended. However, whenever it is a question of treatment of superficial skin lesions, the white mercury-light is to be applied. According to Busk<sup>4</sup> it causes a perceptible erythema on the forearm after one second's application.

2. *Deep effects of the Quartz Lamp.* Judging from my experimental and clinical experiences, I felt justified in expecting a deeper effect from my quartz lamp than from a Finsen apparatus. But, while I have some confirmation regarding this point, I have more objections from others. Wetter<sup>3</sup>, Lohde<sup>13</sup> agree with me; Wichman<sup>9</sup>, based upon clinical experience, and especially Bering<sup>6</sup> upon experimental grounds; Schultz<sup>12</sup>, Stern, Hesse<sup>10</sup>, Busk<sup>4</sup>, Johannsen<sup>5</sup> on a theoretical basis and experimental work, contradicted me.

It seems to me that these opposed results of the various workers are based upon differences in arrangement of the respective experiments, upon different manipulation of the lamps and different calculations, as is most plainly deduced from the paper of Johannsen<sup>5</sup> at the Finsen institute, at Copenhagen. Johannsen gives the



following table for the comparative light energy of the two sources of light:

	Visible Rays (to 0.4)	Inner Ultra- violet Rays (0.4 to 0.32)	Outer Ultra- violet Rays (from 0.32—)
Finsen-Reyn Lamp	4.4	7.1	16
Prof. Kromayer's Mercury Lamp	2.0	8.0	about 35

He allots to the Finsen light the greater "deep-effect," as the visible rays (100.4) are those capable of greatest penetration (4.4:2.0), while he credits the quartz lamp with a stronger superficial effect (35:16).

Johannsen has in this case measured the light energy of the Finsen lamp in the "Finsen Reyn Fleck" (2.1 cm. diameter), *i. e.*, at the point where the rays have the greatest concentration, while the therapeutically available light energy of the Finsen apparatus is evenly distributed over the surface of the Finsen compression lens, which has a diameter of about 3.5 cm. Hence the therapeutically useful light energy of the Finsen apparatus is to that measured by Johannsen in the Finsen Reyn fleck opposite as the square of 3.5 to that of 2.1 or as 441 to 1225, or nearly as 1:3.

In order to compare the therapeutically applicable light energy of both lamps, Johannsen's figures for the Finsen Reyn lamp are to be divided by three, and then the great therapeutic superiority of the quartz lamp over the Finsen Reyn lamp in all kinds of rays becomes apparent, and especially so according to measurements made in the Finsen institute, in Copenhagen:

For the visible rays (100.4) as 2:1.5 (approx.)

For the inner ultra-violet rays (100.32) as 8:2.4 (approx.)

For the other ultra-violet rays (from 0.32 on) as 35:5.6 (approx.)

Bering<sup>6</sup>, who has measured the penetration power of both lamps through mouse skins by means of Eder's photometer (clouding of a solution of neutral ammonium oxalate and mercuric chloride by the influence of light), gives the following information:

Finsen-Reyn Lamp: One skin after 3 minutes=cloudiness.

Two skins after 15 minutes=slight cloudiness.

Three skins no cloudiness.

Quartz Lamp: One skin after 15 seconds=cloudiness.

Two skins after 30 seconds=cloudiness.

Three skins after  $1\frac{1}{2}$  minutes=cloudiness.

According to this, the deep effect of the quartz lamp would be about thirty times that of the Finsen-Reyn lamp.

Wichman<sup>9</sup> considers the deep effect of the blue light of the quartz lamp as greater than that of the Finsen-Reyn lamp, but that of the white light inferior, as by the large amount of outer ultra-violet rays of this light superficial changes are induced upon prolonged raying and these changes oppose the passage of the rays to deeper layers.

I have lately again tested the deep effect of the quartz and Finsen-Reyn lamps on my own forearms by the interposition of well-wetted layers of paper, and obtained the following results:

One layer of paper		2 layers of paper		3 layers of paper	
Duration of raying	Reaction	Deviation of raying	Reaction.	Deviation of raying	reaction
		5 min.	none.	30 min.	none
5 min.	severe Quartzlamp inflamma- white light tion	10 min.	moderate inflamma- tion	50 min.	mild inflamma- tion
5 min.		5 min.	none.	30 min.	none
Finsen Reyn lamp	light erythema	10 min.	none.	50 min.	none

The Finsen-Reyn lamp used twenty-one amperès, the arc was at a distance of 5.5 cm. from the posterior quartz-plate of the concentration apparatus.

For a quartz lamp I used the model with non-adjustable resistance purchased in the open market.

But the final and decisive word of the value of the much discussed "deep effect" will be spoken by further therapeutic experiences themselves.

3. *Treatment of skin areas and mucous membranes not easily accessible.* Most authors justly emphasize the fact of the unsuitability of the lamp in the market (which has a quartz window 4.5 cm. in diameter), when more inaccessible localities (cauthus of eye, nose parts, etc.), are to be treated by compression.

This objection has now been overcome by variously formed smaller compressors, which are adaptable to the quartz window. Ac-

cording to my calculations the light energy is but insignificantly diminished by these adapters.

Upon Schüler's <sup>s, sa</sup> suggestion, the Quartz Lamp Company has manufactured solid quartz glass rods (vide figs. 6 and 7), for the treatment of smaller skin areas and of the mucous membranes.\*

To these quartz rods, one end of which is directly adapted to the plane window of the quartz lamp, the light is propagated by total reflection so as to appear at the end of the rod in its full intensity. It is possible to treat with these the mucosa of the urethra, of the mouth, throat, nose, and most probably of the urinary bladder and the larynx phototherapeutically.

4. *Indications and therapeutic results.* The quartz lamp light has so far been successfully applied in the following diseases: lupus vulgaris, lupus erythematoses, chancroid, teleangiectasis, nævus vasculosus, acne rosacea, acne vulgaris, furunculosis, folliculitis barbæ, folliculitis decalvans capitis, eczema, psoriasis, alopecia pityrodes, alopecia areata, ulcer cruris (Kromayer <sup>21</sup>, Wetterer <sup>3</sup>, Müller <sup>7</sup>, Wichman <sup>9</sup>, Stern-Hesse <sup>10</sup>, Lohde <sup>13</sup>).

Of these diseases lupus vulgaris, the teleangiectases (nævus vasculosus), and alopecia areata, deserve chief attention, because here the light succeeds much better than all other previous methods.

While, besides myself, Lohde <sup>13</sup>, Wichman <sup>9</sup>, Müller <sup>7</sup> and Wetterer <sup>3</sup>, give the preference to the quartz lamp over the Finsen apparatus for the treatment of lupus, and while especially Wetterer obtained cures with the quartz lamp in cases where Finsen-Reyn had failed, Stern-Hesse on the other hand are not satisfied with the effect of the quartz lamp; but these authors have chosen too brief a duration for raying (10 min.).

For the treatment of teleangiectases (nævus vasculosus, acne rosacea) the quartz light takes first place according to Müller <sup>7</sup>. At all events, *extensive* vascular moles can be removed or improved only with the quartz lamp.

In alopecia areata, in so far as it is at all curable, and does not render a cure illusory by a relapse, the light inflammation is acknowledged as the surest means of a cure, and it is offered in a convenient form in the quartz lamp, without this light having otherwise any preëminence over other sources of light in its curative effect.

As regards the other cited diseases, the light is in solitary cases of excellent and perhaps irreplaceable effect, but one should consider that for the majority of cases more convenient methods of treatment can be had.

\* Made and sold by the Quarzlampengesellschaft, Berlin, Pankow.

5. *Concluding Remarks.* In my opinion phototherapy is as yet in its infancy. Only recently has a convenient, cheap and effective source of light been found and, by rendering the mucous membranes accessible to phototherapy, this method can become part of the routine treatment of all physicians, who then *viribus unitus* can elaborate the indications for phototherapy and fix its boundaries.

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## A CASE OF ACQUIRED ICHTHYOSIS.

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IN the enormous majority of instances ichthyosis simplex is a congenital condition, hereditary in tendency, manifesting itself early in life—within the first three years. An identical clinical condition, occurring primarily in grown persons, has been observed in a very few instances. Crocker has seen three such cases, the disease appearing when the patients had reached the ages of thirty-six, sixty-four, and seventy-six years, respectively, and cases (ages not given) have been reported by Tommasoli and Mapother. These are the only examples I have been able to find recorded in literature. Circumscribed areas of ichthyosis may develop in neuritis and tabes (Pusey), but these are excluded in the following instance:

I. D. E. was referred to me for treatment in November, 1907. He is an American, aged twenty-three years, married, and a farmer by occupation. He has experienced only one serious illness, scarlet fever, eleven years ago. His family history is absolutely negative so far as xeroderma or ichthyosis are concerned.

Three years ago the first patch of ichthyosis appeared near the right anterior axillary fold. It gradually increased in size until now it measures 12 by 18 centimeters. Later the left pectoral region became involved, then a circular area some 9 centimeters in diameter manifested itself over the lower sternum. About this time he noticed the same peculiar roughness on the backs of both hands. The skin on these surfaces has become especially rough, harsh and dry. The affection is symmetrical, and certain areas show greater involvement than others. The two spots in the lower abdominal region present sufficient abnormality to constitute a xeroderma only, while several of the other patches are extremely ichthyotic in character.

A careful general examination reveals nothing which throws any light on the etiology. The patient is otherwise apparently healthy and well. He states that he has always been of a nervous temperament. The unaffected skin is seemingly normal, something a trifle unusual in cases of this nature. The reflexes re-

spond readily, and there are no evidences of either tabes or a neuritis. The urine shows nothing pathologic, the blood pressure is 127 mm. of mercury, and the hæmoglobin percentage is over 90.

There has been some improvement under organotherapy, combined with inunctions of olive oil and like agents, but the response to treatment here appears to be more or less transient, just as in ordinary cases of the same disease.

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## SOCIETY TRANSACTIONS.

### THE NEW YORK DERMATOLOGICAL SOCIETY.

355th Regular Meeting, February 25th, 1908.

DR. WINFIELD, Acting Chairman.

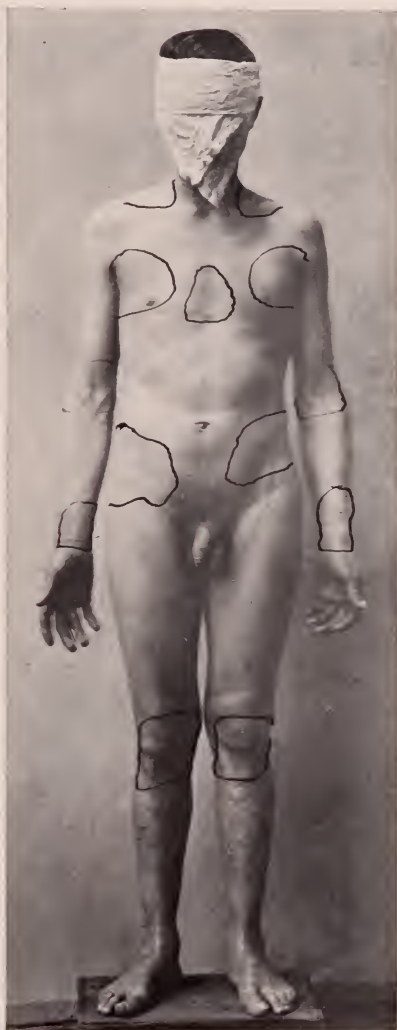
#### Case of Chronic Itching Papular Eruption of the Axillae and Pubic Region. Presented by DR. FORDYCE.

The patient was 48 years of age, the mother of eight children. For eight months she has had an itching eruption in the axillæ and over the pubic region. The itching was so intense that her sleep was disturbed and her general health has been impaired. The ordinary antipruritics like carbolic acid, tar and menthol, have given her little or no relief. The papules were very sharply defined, apparently follicular in site, rather hard, dome-shaped, shiny, semi-translucent, pale brownish-red, with a small centrum punctum. They were uniform in size and might be described as half-way between miliary and lenticular papules. There were disposed in lines, presenting a bead-like appearance when the skin was stretched. On firm pressure a very minute quantity of whitish material could be expressed from some of the lesions; this probably consisted of degenerated epithelial cells. In the axillæ the hairs were broken off or entirely absent. In the pubic region the papules presented the same appearance as in the axillæ, but their site about the hair follicles was more easily made out. Here, too, many of the hairs were broken off or absent, but the alopecia was not as pronounced as in the axillæ. The lesions in this location also were larger—pea-sized—but the individual papules still remained distinct, the larger ones not being due to confluence. No scaling could be made out.

The case was presented for diagnosis because of its unusual clinical features. An early stage of Darier's disease had been suggested.

DR. WHITEHOUSE did not think it was a case of Darier's disease. It seemed to conform very closely to a case presented by Dr. Fox a year or two ago

PLATE XXI—To Illustrate Dr. Kanoky's Article.







under the name of "an itching papular eruption in the axilla." The eruption is decidedly a follicular one.

DR. SHERWELL did not think it was a case of Darier's disease.

DR. JACKSON said that it was apparently an affection of the sweat glands. It was almost a duplicate of a case presented by Dr. George K. Fox some years ago.

DR. ROBINSON hesitated to accept the diagnosis of Darier's disease for the reason that the lesions were so sharply limited and reddish, and possessed such a shining surface. In Darier's disease, as he has studied it, the lesions are flat, nothing like so red as these, and are associated with an increase of scaling about the follicles.

DR. FORDYCE replied that he was not convinced that it was a case of Darier's disease. The lesions were apparently follicular. The case was very similar to one reported by Dr. Fox some years ago, in which he, Dr. Fordyce, had made the histological examination. In that case the site of the papule was about the orifice of the sweat duct and was due to a marked acanthosis which by pressure had led to dilatation of the coils. In that case it had been suggested that the elimination of some toxic substance by the sweat may have been responsible for the perithelial hyperplasia and resulting papule.

#### Case of Morphea. Presented by DR. G. T. JACKSON.

The patient was a married woman, 24 years old. There was nothing of interest in her family or personal history, excepting that in the last year she had been particularly nervous. She stated that the patch came out suddenly six weeks ago. It was 4 inches long by about  $1\frac{1}{2}$  inches wide. It began a little above the collar bone of the right side and ran up behind the right ear. It was smooth, white, firm, superficially indurated. There was no well defined border about the patch. It seemed to be sensitive to touch, and slight burning and itching were complained of.

DR. JACKSON said that he would be glad of any suggestions in regard to treatment.

DR. WHITEHOUSE suggested the use of oleate of mercury, 10 per cent., after the manner of inunctions.

DR. SHERWELL said that morphea and scleroderma were practically analogous etiologically and pathologically, only the circumscribed character of the first differentiating them clinically. The character and extent and longitudinal direction of the lesion, absence of the lilac margin, etc., would lead him to classify it clinically as scleroderma.

DR. ROBINSON agreed with the diagnosis of morphea, and would suggest the use of thyroids. He had seen cases that had disappeared under this treatment.

DR. WINFIELD told of two cases which he had treated at the same time. On one he used thyroid and it got well. On the other he used the high frequency spark, as advocated by the late Dr. Allen, and this case cleared up very rapidly. He gave no internal medicine, no inunctions, and no massage—only the high frequency sparks three times a week.

DR. JACKSON said that he had used the high frequency current in morphea, but obtained no result. He had tried various other remedies, but massage seems to be the best.

**Case of Raynaud's Disease.** Presented by DR. KLOTZ.

Miss J. M., 23 years of age, born in New York. Nurse in training. Had the usual diseases of childhood—measles and scarlet fever—without any complications. Has been in good general health, but somewhat nervous. Remembers that as a child her hands would become cold on very slight exposure. This condition has become somewhat aggravated. After being exposed to cold, her hands become perfectly cold and white as far as the wrist, the nails bluish, and sensitiveness is impaired. After becoming warm again the hands become intensely red and remain of a dark color to a certain extent throughout. The feet are similarly affected, but less intensely. In summer all these conditions are much less pronounced; they are produced only by the differences in temperature, but not by any other cause. The hands are only slightly painful, except when placed in warm water while cold. The condition of the hands was noticed incidentally, the patient really only complaining because she is liable to get deep red blotches in the face on the slightest excitement or exertion which cause but little sensation. Besides, she shows a very pronounced dermographism. It is proposed to subject the hands to a prolonged treatment with Bier's "Stauungs" hyperæmia, with which Arning of Hamburg and several others have obtained good results in similar conditions.

There seemed to be a general acceptance of the diagnosis.

Dr. Klotz said that he presented the case as one of Raynaud's Disease, although it did not strictly comply with the conditions of that affection; instead of paroxysmal attacks we had a permanent condition of the blood vessels of the hand and feet, probably due to some anatomical alterations. However, there was also present an abnormal condition of the vaso-motor nerve, which manifested itself by the dermographism and the blotches on the face. In the absence of any reliable treatment of Raynaud's Disease, it seemed justified to try Bier's treatment in the case, particularly since the circumstances favored its regular application.

**Case of Toxic Haemorrhagic Erythema.** Presented by DR. WHITEHOUSE.

A woman, 67 years of age, who developed the eruption over night, accompanied by severe headache, chilly feelings and fever. There was no vomiting or diarrhoea, but urine was very dark. (It was found later to be albuminous.) The preceding afternoon she had made applications of turpentine to her husband, who was ill, using 5 cents worth of turpentine to 4 quarts of water. She had a very long, deep scratch on the back of her left hand which smarted under the turpentine solution, and the eruption first appeared by swelling and redness around the wound. It spread thence over the back of the hand and the forearm, soon developing upon the back of the right hand and forearm, and upon the face and neck. Both conjunctivæ were injected, lips were cyanosed, and temperature yesterday afternoon was 102.4 degrees F., patient feeling quite ill and

complaining of intense pain in areas involved. The backs of the hands and fingers were intensely swollen, bluish red in color, and very hot to the touch. On the extensors of forearms were large, raised, sharply-defined erythematous plaques, spreading rapidly at the periphery and running together, forming sinuous gyrate borders, clearing up in the centre, leaving bluish pigmentation. A couple of days ago there was an acute exacerbation, large raised, red plaques developing upon the pigmented area, spreading rapidly toward the still advancing border of the original patch, a band of pigmented skin intervening. The lesions on the face and neck were smaller, more widely separated, but of the same character.

DR. FORDYCE said that in his opinion the erythema was a toxic one, produced by the absorption of the turpentine through the abrasion of the skin. In these cases of severe toxic erythema there was often an idiosyncrasy to the drug or application which produced them.

DR. DADE thought it a case of erythema multiforme. He did not see how such an external application would skip some places and make lesions such as these. They do not seem to touch, and are separate from, the body of the eruption.

DR. KLOTZ agreed with Dr. Dade. It was more like an erythema than a dermatitis. He called particular attention to the formation of new rings within the affected areas.

DR. ROBINSON agreed with the diagnosis of toxic erythema.

DR. JACKSON thought it was a multiform erythema due to absorption of the turpentine. He had seen erythema multiforme result from the absorption of iodine which had been applied over a large part of the abdomen.

DR. SHERWELL said that the present eruption was now within the limit of the original patches, and he could imagine the nerves being so affected as to make it essentially a trophoneurosis. Dr. Sherwell as interne in the Brooklyn Hospital had frequently seen sailors brought in suffering from turpentine intoxication. They came from the coast of South Carolina in a vessel loaded with resin and turpentine. They encountered a very severe storm coming up and some of the oil got loose in the vessel. The men dared not make a fire on account of the turpentine, and were compelled to live on the topmast, sending down one man at a time to steer. They lived in an atmosphere of turpentine for several days, and were all poisoned with it. They had generalized erythemas and divers affections of the kidney, the urine showing a great deal of albumin. It was a very good instance of what turpentine would do to people who were exposed to it for a long time. They were all pretty sick men for a long time, but finally all recovered.

DR. WINFIELD had frequently seen dermatitis due to turpentine, resembling the case shown, in circular rings and erythema.

DR. WHITEHOUSE said that he was very glad to hear Dr. Winfield's testimony as to having a similar case resulting from turpentine. At the time it was first observed, it did not seem to him possible that turpentine caused the trouble, yet he did not feel justified in placing the eruption in the ordinary class of erythema multiforme. The sudden onset of the trouble, beginning with chill, fever, pains in the head, efflorescences along the line of the wound on the hand, etc., pointed to some acute toxæmia from absorption. He had since learned that there was some albumin in the urine, but there was not enough of the specimen to make a thorough analysis. Dr. Whitehouse said that he had concluded it was either due to the turpentine or to another infec-

tion which entered the wound at the same time, producing a general toxic rash from absorption.

**Case for Diagnosis. (Lichen planus or Pityriasis rosea.)** Presented by Dr. Fox.

The patient, a young woman, has an acute inflammatory eruption of three weeks' standing, resembling very much that of the little girl just presented by Dr. Dade. The case had been seen at the Skin and Cancer Hospital, where there was considerable discussion as to whether it was a case of lichen planus or of pityriasis rosea. In the daylight it is of a marked purplish color, and shows some little rings.

Dr. HOLDER said many of the lesions, especially on the arm, had a small crust covering them. These suggested an urticarial basis of the lesions. The fact that the lesions extended by the development of raised papules excluded pityriasis rosea.

Dr. JACKSON thought it was not pityriasis rosea, nor did it seem to be lichen planus, though it surely was a lichenoid eruption.

Dr. Fox said that he had the advantage over those present, in having seen the case a week ago and again to-day, and of having seen it by daylight—and yet all that he could do was to present it as a case for diagnosis. It is not at present a scaly affection. A week ago the papules were smooth and suggested a lichen planus, although there were no typical lichen planus papules. The redness of the skin is largely due to the fact that the patient has had no fresh air, and is very neurotic. There has been no tendency to vesiculation, although where she has scratched and torn the lesions some sulphur powder, which she has used to allay itching, has adhered to the abraded places and gives the eruption a scaly appearance, somewhat like pityriasis rosea. The eruption on the arm looks like a group of shining papules, although not the typical angular papules of lichen planus. There is a peculiar purplish hue which one would not see in an acute papular eczema. Dr. Fox said that he would watch the case carefully and perhaps would show the patient again.

**Leprosy. Macular and Tubercular.** Presented by Dr. SHERWELL.

A. M., 17 years of age. Born in Venezuela. Father, mother, and 7 other children all healthy. The patient has always been in fair health, but with a coarse skin. Had an attack of erythema about two years since; has probably had others, but his history is uncertain. The nodules in ear lobes, etc., etc., in his opinion, show unmistakable evidences of leprosy.

All the members agreed upon the diagnosis as presented.

Dr. SHERWELL said that the boy had an uncle who had had the same trouble. He intended to try to have the young man sent back to his own country, to avoid any possibility of trouble, though he did not believe that there was any danger of contagion or anything of the kind in this country. We do not have the chain of conditions here, at least, favoring the spread of the disease.



**An Initial Lesion of the Neck.** Presented by DR. FORDYCE.

The patient stated that about eight weeks previously he had a sore on the side of the neck which had been opened by a surgeon. It did not disappear, but was followed within a few weeks by a generalized eruption. He now presented an oval-shaped, brownish-red cicatrix on the right side of the neck which was distinctly indurated. In direct communication with the lesion and a few inches above it there was an enlarged lymph node—the so-called satellite bubo.

The patient presented a mixed type of syphilide, miliary and lenticular papules, which in places had led to large diffuse scaling plaques.

**Case of Dermographism and Chromophytosis.** Presented by DR. ROBINSON.

The patient showed some interesting spots in connection with the dermatographism. Has had this chromophytosis for over six months, but doesn't know how long the dermatographism has existed. Lost one aunt and two cousins from tuberculosis. Two weeks ago the chromophytosis was much more extensive than at present, as it has been treated by local antiparasitic agents.

**A Syphilide of the Nose.** Presented by DR. FORDYCE.

This patient had been presented before the last meeting of the Society by Dr. Jackson for Dr. Fordyce. She was 45 years old, a native of Russia. The lesion had existed over the bridge and sides of the nose for four years and consisted of a diffuse infiltration, rather bright red in color, with two or three areas of scarring. She said that these scars had been produced by a caustic application. There had been no scaling present at any time. The patient also presented a small perforation of the septum just within the anterior nares. She had been under treatment at another dispensary with presumably antisyphilitic remedies for six months, with little or no effect. During the past month she had been given active antiluetic medication at Dr. Fordyce's Clinic, consisting of 1-12 gr. of bichloride and 30 grs. potassium iodide t. i. d. The lesion had practically disappeared and there was therefore no further doubt as to its nature.

On account of the long persistence of the lesion in one place and its resemblance to the nodular type of lupus erythematosus, a piece of tissue had been excised for examination. It presented a very similar histological picture to lupus erythematosus in the focal character of the infiltration which was almost exclusively lymphocytic and the degeneration of the collagenous tissue of the upper corium.

DR. SHERWELL said that it was not the only case of lupus erythematosus that has improved under syphilitic treatment.

DR. FORDYCE said that the therapeutic test had, of course, demonstrated that

the case was one of syphilis, but he still adhered to his original statement that the case presented unusual manifestations for a syphilide, namely, its long persistence in one place with little tendency to spontaneous involution, its bright red color and absence of individual nodules. Then, too, the histological picture was much more that of a lupus erythematosus than a syphilide. It was interesting to compare the histological features of this case with lupus erythematosus, with which it had certain clinical resemblances.

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## BOSTON DERMATOLOGICAL SOCIETY

### NOVEMBER MEETING.

DR. HARVEY P. TOWLE in the Chair.

**Lupus Vulgaris.** Presented by DR. JOHN T. BOWEN.

Hazel M., 15 years of age. The duration of the cutaneous process is a year and a half. There first appeared a small red spot just within the left nostril; from that lesion the lobe of the nose became involved. Three months ago a crusting nodule appeared on the upper lip, just to the left of the median line. The lesion on the right knee began to develop about a month after that on the nose. At about that time there also occurred an inflammatory affection of the eyes.

The soft parts of the nose are red, swollen and infiltrated; the right ala nasi being partly destroyed by ulceration. Extending from the right side of the lobe onto the neighboring portion of the cheek there is an ulcerative lesion an inch in diameter possessing a soft, thickened base covered by a thick purulent crust. The bases of the ulcers, on removal of the crusts, have bright red granulating surfaces and slightly indented irregular borders. Internal examination of the throat and nose showed infiltration of the epiglottis and general thickening of the Schneiderian membrane. The lesion on the knee is 2 x 3 inches in diameter, ulcerated and crusting. There, like the process on the nose, the infiltration is rather soft and the configuration irregular. The left eye is congested and presents the results of chronic keratitis. Examination of the cornea reveals numerous minute ulcers and scars, the latter having produced considerable corneal opacity. On ophthalmic consultation the opinion was expressed that the condition was tuberculous.

The lesions on the skin being considered tuberculous, all of them were thoroughly curetted under ether and thereafter exposed to X-rays for ten minutes, three times a week. Under this treatment all the lesions healed in six weeks. The condition of the eye had, in the meantime, greatly improved under argyrol.

On October 21, 1907, the patient was again admitted to the Massachusetts General Hospital on account of reappearance of the process on

the nose and lip. About the scars of the old lesions was some ulceration and crusting similar in appearance to that described as existing last winter. The eye is better, but still shows some corneal activity which necessitates constant attention.

It should be said that, before curetting the affection last winter, a two weeks' trial of potassium iodide was made with negative results.

DISCUSSION: On the evidence given a majority were willing to concede the diagnosis of tuberculosis. A doubt was expressed as to the correctness of the diagnosis of tubercular keratitis in many cases. Keratitis, either of tuberculous or syphilitic origin, is usually a very difficult condition to heal. The therapeutic test is not infallible.

#### Hereditary Syphilis. Presented by DR. HARVEY P. TOWLE.

Agnes R., 18 years of age. Family history negative. A brother, two years younger than the patient, was born dead. She was always well until nine years of age, when she had an eye trouble which was treated and cured at the Eye and Ear Infirmary. She then remained well until three years ago, when a sore appeared under the chin which required six to seven months to develop. It was opened and discharged pus for several months, finally healing. Soon after, a swelling appeared on the neck. This was opened and drained.

The following year a lesion occurred on the side of the nose, near the eye, which lasted six months, and before healing discharged much pus and three small pieces of bone by way of the mouth. About a year and a half ago a swelling began to form in the forehead which, in the course of two months, was operated on and a piece of bone removed. During the past two years the left elbow and forearm have caused much distress from painful swelling and the forearm after an incision discharged purulent material. An eruption appeared on the lobe of the nose a year ago which on healing left some permanent depression.

Physical examination: The patient is poorly developed and nourished. Her muscles are small and soft with practically no panniculus. On the left side of the forehead, at the hairy margin, there is a scar four inches in length, the site of ulceration and removal of pieces of the frontal bone. Vision is unimpaired, but there is noticeable deafness. The teeth are poorly developed and somewhat peg-shaped, but they show no notching at their cutting edges. A greater part of the nasal septum is destroyed. The heart and lungs seem normal. The liver and spleen are not demonstrably enlarged. For several years the patient has been annoyed by night sweats. The right hip and knee have been painful, with some swelling of the latter, for several months.

DISCUSSION: The diagnosis of hereditary syphilis was unanimously accepted in this case.

**Chronic Urticaria.** Presented by DR. C. MORTON SMITH.

Dorothy B., aged 2 years. This child is said to have been well until last July when she had chicken-pox. A few weeks after recovery the present trouble began and has lasted for at least three months. Lesions are present on the palms, soles, arms, legs and trunk. They appear as small red papules, accompanied by itching, which is worse when the child gets warm. On account of scratching most of the older lesions are excoriated and more or less crusting. Sparsely scattered over the trunk are occasional wheal-like lesions. The child has shown no evident symptoms of scabies; neither are other members of the family affected with a skin eruption. Enlarged glands are palpable in the groin, neck and behind the ears. The digestive tract is not demonstrably disturbed, but the mother says that she allows the child to eat most everything except meat and fish.

DISCUSSION: A chronic urticarial condition caused by faulty digestion, and, possibly, scabies as a contributing factor, was thought to explain best this mixed dermatosis.

**A Case of Mycosis Fungoides.** Presented by DR. CHARLES J. WHITE.

Mrs. S., an Irish woman, aged 56, entered the skin ward of the Massachusetts General Hospital July 5, 1907.

Shortly after her menopause, ten years ago, a dry, scaling eruption developed on her legs and gradually spreading upwards became universal a year ago. In the succeeding months lumps appeared in the groin, axillæ and flexures of the elbows. Pruritus was never a marked symptom. At entrance her skin, with the exception of the head, was highly reddened and covered with enormous scales, attached to the body by only a small fraction of their surface, giving the patient a most extraordinary appearance. In addition there were noted, in the sites above mentioned, hypertrophic, clay-colored, fissured, rather soft tumors.

The urine was acid, sp. g. 1023, and contained a slight trace of albumin and 2.4% urea. Her blood count was: leucocytes 13,400; hæmoglobin 95%; polynuclears 63%; mononuclears 30%, and eosinophiles 7%. The weekly blood count was made for a month, the special features of which were an eosinophile percentage of nineteen on July 22, and gradually diminishing leucocytosis.

The histological examination of one of the tumors was made by Dr. F. C. Kidner, a pathologist connected with the hospital, who presented the following unexpected report which can perhaps be explained by the comparative superficiality of the excised specimen: "Dense fibrous tissue, not very vascular, and caused by a much thickened, very irregular epidermis. The papillæ are in places six to seven times the normal length, whereas between the papillæ the layers of cells are fewer than normal. The epidermis has broken down in one spot, forming masses of



epithelial cells lying in an actively growing granulation tissue. The epithelial growths seem to be *en masse* rather than infiltrative. There is considerable inflammatory reaction. The epithelium in some places is necrotic, while at others there are mitotic figures. The specimen suggests an epithelioma but also simple granulation tissue."

The treatment of the disease has been the administration of arsenic up to the limit of toleration (several times reaching a maximum of eighteen minims of Fowler's solution t. i. d.), followed by total abstinence from the drug, and the application of X-rays cautiously to prevent any auto-intoxication.

Amelioration of symptoms has been slow. Persistent X-radiation at any one point has never failed to dissolve the tumors, but others have appeared at other sites. The exfoliation, however, has completely disappeared and here and there the erythema has gone, leaving apparently normal skin.

The following clinical extracts will show the present favorable condition of the patient:

Oct. 7. General condition: Numerous pea to marble-sized tumors scattered over the body.

Oct. 15. Skin less red. Nodules decreasing in size.

Nov. 1. Tumors dry. No tendency toward ulceration.

Nov. 7. Skin has grown less red and of a better texture. Only here and there any signs of fresh tumors.

DISCUSSION: The definite characters of this dermatosis and its protracted observation left little wanting to determine the diagnosis of mycosis fungoides. The control and improvement of the tumors under the influence of X-rays thought worthy of favorable comment.

#### **Tuberculide.** Presented by DR. F. S. BURNS.

This young woman, who is 21 years of age, says that she has had an eruption on her feet ever since she can remember which has invariably consisted of pea-sized papules that formed ulcers which were always extremely slow in healing. The lesions have usually appeared in winter and healed in summer. She describes them as having been "hard, painful spots, of a dark red color." Three years ago similar lesions began to appear on the left ankle and to spread slowly up the leg. As yet the right leg has been only a little affected. On the outer surface of the lower third of the left leg are four irregular shaped ulcers; the largest  $\frac{3}{4} \times \frac{1}{2}$  inch, the smallest  $\frac{1}{2}$ -inch in diameter. These ulcers are shallow and have a purplish-red area of induration about them. Scattered over the lower two-thirds of the leg are numerous pin's head to dime-sized slightly depressed, pigmented scars. About the knee and for about half way up the outer surface of the thigh the skin is stippled with small cicatrices. Each scar is said to have been the site of a previous ulcer.

One sister died of phthisis, another of inflammation of the bowels, while a third is nervous and is said to have ulcers on her legs like those on the patient's. Except for the outbreak on the skin she has always considered herself in good health until last June when she had a hemorrhage from her lungs (she felt choked, then coughed up half a cupful of bright red blood). A second hemorrhage occurred in August and a third last week, when she says a half pint of blood was coughed up. Physical examination discloses nothing abnormal. She appears healthy and well-developed but pale. No tubercle bacilli have been found.

DISCUSSION : The diagnosis of tuberculide was accepted.

**Lupus Vulgaris.** Presented by DR. F. S. BURNS.

Mrs. P., aged 40, seamstress. The skin affection dates back three years to a burn on the left wrist from a stove. The burn was slow in healing and a sore resulted, which at first was open but later healed over. The right wrist is implicated with a similar process but more superficial. On the flexor surface of the left wrist is an aggregation of lesions consisting of bean to dime-sized papules and tubercles, discrete and confluent. They are rather soft, of a brownish-red hue and have fairly well defined borders. Some of them are covered by thin lamellate scales. Outlying the larger lesions are several dull brownish-red papules which do not fade on pressure. The left wrist shows a group of nodules with characters similar to those on the right. Over the inner surface of the left knee is a dull red, soft area two inches in diameter. A week ago there appeared some acute lesions on the legs (anteriorly and laterally) consisting of circumscribed congested nodules, one to two inches in diameter, somewhat infiltrated and rather sensitive.

The patient's mother, several maternal relatives, two brothers and a son have died of phthisis. Internally the patient seems well. No visceral involvement has been detected.

DISCUSSION: Opinion greatly concurred with the diagnosis of lupus vulgaris relative to the chronic lesions on the wrists and knee; the recent outbreak on the legs was thought probably an acute expression of erythema induratum.

**A Late Cutaneous Syphilide.** Presented by DR. CHARLES J. WHITE.

Mrs. H., aged 30, has been married two years and has no children. One year ago nodules began to appear on the back of the hands and have slowly increased in number. Six months ago similar lesions began to develop on the right cheek and forehead and when first seen one week ago appeared in somewhat crescentic arrangement as brown-red, pea-sized, round-topped nodules neither hard nor soft in consistency. Under firm pressure by glass they remained distinctly brown-red while

the surrounding tissue was entirely blanched. The lesions of the hand were also somewhat crescentically distributed, but were bluish-red in color, and disappeared entirely with the diascopic test. Nowhere on the face or hands were scars or atrophic skin visible.

The patient was given iodide of potash internally and was requested to apply nothing externally.

When seen again the woman said that she had taken but five doses of the medicine as it was so disagreeable, but nevertheless the possibly tuberculous character of the lesions had disappeared so that one no longer hesitated to call the disease syphilis.

DISCUSSION: Syphilis was the unanimous diagnosis in this case.

F. S. BURNS, Secretary.

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## CHICAGO DERMATOLOGICAL SOCIETY.

Meeting of February 28, 1908.

Dr. Jos. ZEISLER, Chairman.

Case of Erythema Multiforme. Presented by Dr. ZEISLER for Dr. SCHRAM.

The patient, a young man of about thirty, presented a perfectly classical eruption of erythema multiforme of the iris type. No decided etiological element could be established. The lesions were found chiefly upon the backs of the hands, but what was most interesting was the presence of similar iris-shaped lesions upon the lips, the tongue, and the buccal mucous membrane.

Case of Serpiginous Chancroid. Presented by Dr. O. S. ORMSBY.

The patient was a single man aged twenty-two, an Italian laborer. The disorder began with a soft lesion on the penis, which was followed in four weeks by a bubo. The latter was lanced and immediately began to spread, and produced in seven months the ulcers now present. The area of involvement occupies the entire groin, extending externally over the crest of the hip, internally involving the thigh and the scrotum. The lesions consist of serpiginous ulcers, with patches of sound tissue and considerable scar formation throughout the area. Except for the primary elements, the general character suggests a serpiginous syphilide. (Since exhibiting the patient the lesions have been almost entirely eradicated by cauterization.)

**Case for Diagnosis.** Presented by Dr. E. L. McEWEN.

Geo. V., aged thirteen, slender, poorly nourished. When first seen there was present upon the anterior surface of the right leg near the middle, a shallow ulcer, quarter-sized, with soft, granulomatous, pus-covered floor, borders slightly raised, not indurated, the whole surrounded by a dark reddish-blue zone of color. Near this ulcer were several split pea-sized papulo-ulcerative lesions arranged as satellites. Upon the left leg were three smaller ulcers of a similar type. The lesions would first appear as "small blisters," with red areola and "black center." Several small, pigmented scars were present where former ulcers had healed; their borders were not distinctly circular; their depression showed an appreciable loss of tissue as the result of the process. The condition had existed about four months. No evidence of systemic tuberculosis could be found. There was a history of three attacks of measles, and of eight deaths among brothers and sisters, four of whom died from measles contracted from him. When presented to the society, he had been treated with local antiseptics for one month; distinct improvement had resulted, but entire healing had not occurred.

As to diagnosis, the opinion of the Society was divided between *Erythema induratum* and a simple infection in a cachetic individual with very low resistance; the majority rather favored the latter diagnosis.

**Case of Alopecia Areata.** Presented by Dr. HYDE.

The patient was a vigorous man, with heavy hirsute growth upon body and limbs. On the left forearm, arm, shoulder, and thigh were several large areas entirely destitute of hair. The condition had been present for several years, and no etiological factor could be determined.

**Case of Pityriasis Rubra (Hebra).** Presented by Dr. WM. QUINN.

Miss Q., aged thirty-three; previous good health. In October, 1907, patient first noticed a scaling condition in the scalp, which rapidly spread to the chest and back. When first seen, in November, 1907 (with Dr. F. S. Hartman), the eruption had extended over the face, arms, and lower extremities, though there were still many areas of normal skin present. The legs were markedly swollen and the patient complained of burning of the skin and a sensation of chilliness. Later the swelling of the lower extremities disappeared, but recurred again in January, 1908. When shown to the society the entire skin was involved, and was covered with fine branny scales, which were constantly exfoliating in large quantities. The color of the skin was pink; there was no infiltration of the cutaneous tissue; the glands were all enlarged; there was considerable falling of the hair; the nails were dry, but had not been shed; the mucous membranes were not involved, except for some annoying irritation of the conjunctivæ. The scales from the palmar and soles



were large and less frequently cast off than those of the general skin surface. The patient had lost about thirty pounds in weight.

**Case of Epithelioma.** Presented by Dr. PUSEY.

In this case the tumor growth on the cheek had developed upon an area of *lupus erythematosus*, the patient, a man of thirty-five, having an extensive symmetrical erythematous lupus covering a large part of the face.

Dr. Pusey also presented a case of *Blastomycosis*, previously exhibited, showing the very great improvement which had taken place from thirty grains of potassium iodid daily, and the use of X-rays short of reaction.

ERNEST L. McEWEN, M. D., Reporter.

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## THE PHILADELPHIA DERMATOLOGICAL SOCIETY

The regular monthly meeting of the Philadelphia Dermatological Society was held at the Jefferson Hospital on Tuesday evening, February 18, 1908, at 8:30 o'clock, Dr. M. B. HARTZELL presiding.

**Papulo-tubercular Syphilis, a Probable Case of.** Presented by Dr. STELWAGON.

The patient was a well-built, robust girl of six years of age. According to the mother's history, the child had had a slight rash on the forehead, with enlargement of the glands of the neck, and sore-throat, at four months of age. The history was extremely indefinite. At the present time a curious eruption of four months duration was noted upon the inner and posterior surface of the thighs, the gluteal, and the lumbar regions. There were about a couple of dozen lesions in all, from split-pea to dime in size. The lesions were bright red, sharply marginate, raised, infiltrated new growths. The surface was somewhat shiny and slightly scaly. They had a linear and somewhat serpiginous arrangement, being symmetrically arranged on the two thighs, although the left had the more lesions. The submaxillary, sublingual, and the posterior cervical glands were slightly enlarged. There was some pruritus and also burning. Fissuring was noted at the corners of the mother's mouth. A form of tuberculosis of the skin was first suggested because of the general character of the lesions, but was excluded because of the short duration. A hypertrophic lichen planus was discussed because of the irregular shape and shiny surface of the eruption. By exclusion the case was diagnosed as one of syphilis.

**Folliculitis Decalvans, A Case of.** Exhibited by Dr. DAVIS.

The patient presented was a male of thirty-one years, and until five months ago the scalp was in normal condition. The disease started

with the development of small erythematous patches on the scalp, accompanied by slight itching and burning. These patches increased in size, and the hair in these areas became loose and fell out. At the present time there are a group of a dozen, red, slightly depressed, oval patches above the occiput, at the vertex of the scalp, from dime to one-quarter-dollar in size. There has been some coalescence into larger areas of baldness. All of these patches are entirely denuded of hair, and atrophy of the skin is noted. The hair surrounding these bald areas is somewhat thinned. *Morphœa* had been the first diagnosis thought of by the exhibitor.

**Epithelioma, A Case of, Involving the Eyeball.** Presented by DR. GASKILL.

The patient was a male of seventy, and had first noted the start of this condition twelve years previously. The tumor was operated upon five years ago with some form of caustic, with slight amelioration. Since then, however, the condition has been becoming progressively worse. At the inner canthus of the right eye, and extending slightly upon the conjunctiva, there is a three-cent-piece sized, sharply marginate, ulcerated lesion. There is a typical pearly border to this lesion, and the floor is slightly papillomatous, reddish-yellow, and covered with a muco-purulent secretion. The nasal canal has been somewhat obstructed by this tumor, and the tears flow down on the right cheek. This constant moistening of the cheek has caused an eczema of the right side of the face.

It was brought out in the discussion that the X-ray used with great care frequently cures epithelioma of mucous membranes. Dr. Hartzell mentioned the model in the Saint Louis Hospital, of Paris, in which carcinoma recurred in the scars, from stitches in a breast amputation. Thus exemplifying how epithelioma tends to recur.

**Syphilis Resembling Dermatitis Herpetiformis, a Case of.** Exhibited by DR. STOUT.

The patient, a male of twenty-nine years, had first noticed the eruption six months ago. On the dorsum of the hands, on the back, on the buttocks, and also on the extremities were found groups of vesico-pustules, and also papules. All the lesions were grouped, crescentically arranged, and somewhat symmetrical on the two sides of the body. There was some pruritus and burning. The grouping of the lesions had lead to an original diagnosis of dermatitis herpetiformis. This diagnosis was changed to the above when scarring, pharyngitis, pigmentation, and glandular enlargement were noted. This eruption would probably be classed as corymbose in type. The patient also had an eruption on the elbows and knees, and small scaly spots upon the trunk and extremities. This latter eruption was three-cent-piece to one-half-dollar in size, sharply marginate, bright-red, and covered with whitish scales. He had had this scaly eruption, off and on, for some years; the entire cutaneous surface

having been involved. This latter eruption was diagnosed as a seborrhoic type of psoriasis.

**Papulo-tubercular Syphilis, a Case of.** Presented for DR. FINCK.

The patient was a female in the late twenties. This condition had started some months previously. The eruption was located upon the entire chin, and also somewhat on the left lower cheek. It consisted of gyrate and festoon-like, raised, pinkish, papulo-tubercular lesions. At the first glance it resembled slightly a papular erythema multiforme, but the lesions were infiltrated new-growths.

**Photomicrographs Taken by the Lumiere Color Method.** Presented by DR. HARTZELL.

Dr. Hartzell exhibited to the society some beautiful specimens of this process. A section of molluscum contagiosum stained with eosin was first shown. Then Darier's disease, showing the round bodies, stained with eosin and hematoxylin. A section showed how the mastzellen, although stained with toluidine blue, came out red. The orcein and hematoxylin stains for Paget's disease, showed distinctly the destruction of the epithelium. A section of senile keratosis stained with carmine, exhibited sweat glands and ducts. Two other specimens of Darier's disease were also presented; one a low power stained with eosin and hematoxylin, and the other stained with the same, showing the whole length of the follicle. The micro-photographs all showed the exact shade of color, as seen through the microscope. A long exposure was required for each of these photographs, twenty minutes as the minimum for those of low power, and as long as two hours for those of the highest power.

**New Salve Base, a Glycero-stearate.** Presented by DR. DAVIS.

This has the advantage of drying very rapidly, of containing no grease to stain, and being very soluble in water. This preparation can be rubbed very nicely into the scalp. It is white, resembling in appearance the best made cold cream, and has practically no odor. It was suggested, among other diseases, as a good base for the treatment of scabies, as there was no grease to stain the underclothing.

FRANK CROZER KNOWLES, M. D., Reporter.

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**MANHATTAN DERMATOLOGICAL SOCIETY.**

62d Regular Meeting, October 4, 1907.

Dr. EDWARD PISKO, Presiding.

**Naevus Linearis.** By Dr. A. BLEIMAN.

Julius K., seven years old, born in Hungary. Mother states that the lesions were present at birth, but were very slight and only became really noticeable at the third month. Since that time they have remained practically unchanged. They consist of a row of warty excres-

cences arranged in a long line extending from the dorsal surface of the middle toe of the right foot up on to the dorsum of the foot, extending thence upward along the outer border of the right leg to the thigh and buttock. The back is clear; but the lesions begin again at the angle of the right scapula, run over the shoulder and clavicle and down the right arm to the back of the middle finger. A branch of the lesion on the upper extremity leaves the main line at the clavicle, and extends to the center of the right pectoral region. All the lesions were of a distinctly verrucous type.

Some of them had been curetted off, but had promptly reappeared.

DR. WHITEHOUSE suggested the employment of 20% salicylic acid paste; liquid air did not effect warty growths like this.

**Naevus Linearis of the Angiomatous and Verrucous Type.** By Dr. I. P. OBERNDORFER.

Fanny S., ten years, showing a narrow line of tumors extending from the sole of the right foot, up the leg to the lower half of the thigh. The lesions are a multitude of small, mostly pinhead-sized points, bluish-red in color, and evidently minute angiomata. In some places they are darker in color and distinctly verrucous on their surfaces. Along most of the lesion the tumors are in a single thin line; but in some places they are aggregated into groups as large as a 5-cent piece. In one or two places there are larger masses, composed of a number of angiomata and covered with crusts.

Five years ago a strip of the affected tissue ten inches long was excised in Warsaw; and here, in the scar tissue, there has been a re-appearance of the characteristic tumors.

In the discussion, the employment of liquid air was advocated; DR. LUSK stated that better results would be obtained from it in a case of this kind than from the electric needle.

**Scleroses of Both Nipples.** By Dr. W. S. GOTTHEIL.

Mary M., white, forty; admitted to City Hospital September 20, 1907. Some six weeks ago her husband bit her on either nipple, not causing bleeding, but leaving the marks of his teeth upon the mammillæ. These soon disappeared, and she only remembered the fact of the injuries when the nipples began to get sore. She attributes the condition of her breast to irritation from her clothing, and only recollected the injuries on questioning.

On admission there was on the right breast, just above the nipple and occupying the areolar area, an oval, inflamed, elevated, and croded mass  $\frac{3}{4}$  of an inch in transverse and  $\frac{1}{2}$  an inch in vertical diameters. The margins of this lesion are brownish red and angry looking; its center is exulcerated and depressed, and the entire base is the seat of a very hard, painless and typical induration. The skin around this lesion, and, in fact, that covering the entire gland, is reddened, covered with vesicopapules, and in an acutely eczematous condition.



On the left breast the entire nipple and areola is swollen, dusky red, and covered with a dark brown adherent crust. The nipple is four times the size of its fellow on the other side, and the entire mass and the tissues of the areola around it is the seat of a very large, painless, hard induration. The skin covering this breast also is the seat of an acute eczematous efflorescence.

Besides these lesions, the patient showed a characteristic macular general exanthem, with lesions on the palms, adenopathy, angina, etc.

September 30. The large dark crust has fallen off from the left nipple, leaving a half-dollar-sized, typical sclerosis. The eczematous lesions, evidently due to some external application that has been employed, have largely retrogressed.

At the present moment both lesions are perfectly characteristic, as are also the other evidences of constitutional infection.

DR. PAROUNAGIAN had had a case some time ago with three chancres on one breast and two on the other, contracted from her own nursing baby, who had been infected by a kiss from a servant girl in the house; this was very unusual infection sequence. Two years ago he presented a case to the society with a chancre on the lip and one on the penis at the same time. DR. LUSK had recently seen three chancres on the neck in one patient.

The reporter stated that for some reason or other he had seen several cases of multiple chancres of the lips, two with three and one with four distinct lesions during the last year or so. As regards the number of lesions that may appear, he had a cast of one case with 13 and photographs of another with 13 distinct scleroses; in both of these the lesions were in the sulcus; and in both there was a distinct history of recurrent herpes, and intercourse whilst suffering from these lesions.

### Macular Atrophic Blue Pigmentation of Arms and Legs; Presented for Diagnosis. By Dr. W. S. GOTTHEIL.

Female, aged forty-five; admitted to ward 13, City Hospital, for several abscesses of the thighs, due to infection from hypodermic injections self-administered. Incision, drainage, healing. The condition for which she is presented here is the following: The entire outer, inner, and anterior surfaces of both thighs, and the anterior surfaces of both arms, are studded with a multitude of lesions from large pinhead to large pea-sized lesions of identical characters. They are oval or rounded, distinctly depressed and atrophic, light to dark blue spots, looking at first sight like tattoo marks. The patient has been addicted to the use of narcotics hypodermically for many years; the spots are due to these, and the patient attributes no importance to them. She uses both morphine and cocaine in unknown amounts, buying the "dope" in solution at the druggists. Of fair intelligence, she is very positive in the statement that the blue marks are due only to the cocaine injections; morphine never causes them, cocaine always does. She avers that some ten or twelve other persons, inmates of the house in which she lives, and addicted to similar habits, get the same blue marks from cocaine purchased at the

same places. The cocaine injections do not hurt her or remain tender any longer than those of morphine. The reporter is at a loss to determine the cause of the pigment deposition and the evident atrophy. He has never seen such lesions follow hypodermic injections; nor has he ever seen such lesions in the many drug habit habitués necessarily encountered in hospital and dispensary practice. For experimental purposes this patient was given a morphine injection in one and a cocaine injection in the other buttock two weeks ago; there has been absolutely no reaction or pigmentation in either.

In the discussion Dr. KINCH and others inquired whether the patient was in the habit of flaming the needle before inserting it; the lesions look like tattoo marks. Dr. LUSK inquired if a copper needle had been used, since the color was that of copper and not of iron salts. The patient used the ordinary steel needles, and employed no precautions. Dr. WHITEHOUSE had seen one case of the kind at the Manhattan State Hospital, and believed that the combination of morphine and cocaine might be the cause of the tattooing. Dr. GEYSER believed that the patient's statement as to cocaine being the cause was correct. Cocaine as usually employed is an unstable oxy-chloride; the nascent acid acts on the needle, and the iron salt is deposited in the tissues. Dr. SATENSTEIN called attention to the fact that if an ordinary cocaine solution is allowed to remain in the needle for some hours, the remaining material appears as a blackish-blue drop when expressed.

Dr. GOTTHEIL: Dr. GEYSER's explanation seems reasonable; it accounts for the pigmentation, but not for the very evident atrophy. Nor does it account for the fact that among the many persons who use the drug under conditions similarly careless, pigmentation and atrophy of this nature should be so rare as to be practically unknown. An excision had been made, and a micro-chemical examination would probably throw light on the nature of the pigment.

### **Fungating Epithelioma Cured by 12 X-rayings at Weekly Intervals.**

By Dr. A. C. GEYSER.

Mrs. K., 75. Four years ago a lesion began as a pimple on her upper lip; treated without success; gradually grew into a fungating mass over an inch big; patient's age precluded removal and plastic operation. Diagnosis, Fungating Epithelioma. Last summer, at the Cornell University Skin Clinic, diagnosis confirmed. Cornell tube applied in direct contact with the lesion; 12 sessions of 5 minutes each once a week. Result, complete removal with practically no scar. There was question, however, on the part of some members, as to the thoroughness and permanency of the cure. Dr. Whitehouse has a case of rodent ulcer now that was apparently cured by the same means, and which has relapsed in 6 months.

### **Syphilis Maligna Praecox: Multiple Subcutaneous Gummata with General Pustulo-Rupial Exanthem Two Months After Infection.**

By Dr. W. S. GOTTHEIL.

A. J., 25, male, colored, admitted to City Hospital September 20th, 1907. Sore on penis for the first time in his life two months ago;

treated for chancre in St. Luke's Hospital Dispensary; dorsal slit done there for phymosis.

*Status Praesens:* Dorsal slit exulcerated at edges, which with the surrounding preputial tissues are markedly indurated. Induration still present along preputial edge where chancre was. Body, limbs, and face covered with an abundant papulo-tuberculo-pustular syphiloderm of varying size, with marked tendency to central breaking down and crusting. On the alaenasi and in the nasal furrows characteristic conglomerate tubercles. Dry crusted tubercles on scalp. Pinhead to pea sized papulo-tubercles on back; abdomen fairly free. Both upper and lower extremities show a multitude of similar papulo-tubercular and pustular lesions, with marked tendency to ruptural crusting at elbows and knees.

Besides these lesions there are a number of deep gummata on the arms and legs. On the right arm are 6 varying in size from that of a large marble to an egg, most of them soft and fluctuating, and with adherent skin. Left arm, 2 small gummata. Right thigh, 1 large gumma on the posterior internal surface. The lower legs show no gummata, but there are a number of deep ulcerative lesions in addition to the general exanthem. There are buccal mucous patches, and a typical angina.

This patient, therefore, besides the general secondary syphiloderm of the above described severe type, has nine gummatous lesions, some of which are quite large and apparently about to break through the skin. That he is still in the very earliest stages of his infection is evident from the distribution and general character of his eruption, as well as from the distinct remains of his initial lesion. His history may, if desired, be considered confirmatory evidence.

In the discussion of the case DR. DITTRICH mentioned one in which there occurred gumma of the iris, and periostitis, coincident with a general macular eruption, and within four months of infection. DR. ABRAHAMS suggested that, as was undoubtedly the case in scarlatina and other infections, a differences in severity of the infection in cases where there was no apparent marked differences in soil. In time we should probably be able to recognize differences in the spirochæte growth itself that would account for these. DR. Lusk agreed, calling attention to the frequently malignant type of the disease when contracted in China and other Oriental countries, etc. DR. BIELMAN has a case now confined to bed with a syphilitic pachymeningitis, who contracted the disease in January last, eight months ago only. The reporter was undoubtedly of opinion that differences in the virulence of the infecting micro-organism, or in the amount inoculated, were necessary to explain the differences seen in cases in which there were no marked personal reasons for the severity or mildness of the symptoms. It was possible also that a previous infection, or a heredo-syphilitic taint might in some degree account for the differences. Mere differences in soil was not enough to account for the tremendous differences in symptoms.



**Bleeding Stigmata? By Dr. W. S. GOTTHEIL.**

Harry D., forty, Russian; first seen August 12, 1907. Complains of periodic, spontaneous hæmorrhages from the nose, tongue, and lips; has had this condition as long as he remembers, and for which he has been under treatment both in Europe and in this country. Is not a bleeder in the ordinary sense of the term, as cuts do not bleed excessively and heal readily; recently has had a tooth extracted without much bleeding resulting. Patient states that his bleeding is of two distinct characters: From the nose in the form of slow trickling, lasting from ten to fifteen minutes; from the visible lesions of the tongue and lips (to be described later), it comes in the form of a sudden spurt of blood reaching out a foot or two from the lips, or if his mouth is open; lasts two to three minutes and stops spontaneously. Is perfectly sure that these hæmorrhages have no relation to injuries, or to mastication, picking of the teeth, etc. He feels some blood in his mouth, and if he goes quickly to a mirror can see the spurt. The hæmorrhages come on at entirely irregular intervals; there are sometimes only one a week or so, and sometimes he has several in one day. Latterly they have been getting more frequent.

*Examination.* Nasal mucosa and that of the pharynx and gums only slightly congested. Tongue and lips show a number of minute, bright red spots, pinhead and less in size, looking like small angiomas. These, the patient states, are permanent; and they have certainly not changed from the time of his first examination to that of this present report, October 4, seven weeks.

Family history is of some interest, though the patient is not well informed as to the facts of his grandparents and to some of the immediate members of the family.

Parents—Father was not a bleeder; mother had spots on lips, and is said to have died of hæmorrhage, twenty-seven years old.

Brothers—Has four, all living; three, aged 55, 50, and 48, are bleeders; one, aged 40, immune. All have hæmorrhages from the nose, but no spots in or bleeding from the mouth.

Sisters—Two; one is a bleeder like her brothers.

Children—Five; two are bleeders from the nose, like his brothers.

Nephews and Nieces—Exact records not yet attainable. Eldest brother has eight children; some of them are nose-bleeders. The youngest has two children, immune.

Altogether, out of thirty members of this family, at least ten are or have been bleeders. None, except the patient and his mother, have shown the red spots on the mucosæ with the visible hæmorrhages.

Treatment has been with fluid extract of ergot exclusively; the patient for some time has been taking thirty drops of this drug three times a day. The spontaneous hæmorrhages have gotten less and less; at present time not very frequent.



DRS. ABRAHAMS and WEISS considered this as a case of hysterical hæmorrhage. DRS. OCHS and ABRAHAMS could recall similar cases which they at different times had presented before this society. DR. LUSK suggested the use of the gelatine treatment. DR. ABRAHAMS states he had tried gelatine in other cases and could not recommend it as having any particular value in cases of hæmorrhages. DR. GEYSER suggested the exhibition of calcium chloride in from 5 to 10 grain doses, three times a day, while the explanation that the blood will take up this drug when it will not take the sodium salt, increasing the sp. gr. of the blood and thus diminishing the tendency of the hæmorrhages. DR. GOTTHEIL considered the lesions in the mouth as true angioma, and the probable cause of the hæmorrhage due to muscular contractions.

#### Lichen Planus. By Dr. L. WEISS.

Mrs. N. L., fifty-four; interesting point in this case is the fact that patient had a similar condition over thirty years ago. The lesions are most marked on the extremities.

DR. LUSK in every case of lichen planus gives patient bichloride of mercury, in one-one-sixteenth of a grain dose, three times a day, in combination with gentian, nux vomica, and water. Finds that improvement results in three weeks.

#### Syphilis and Psoriasis. By Dr. E. Pisko, courtesy of Dr. Lusk.

Male, twenty-five; two years in this country; has acquired his syphilitic infection since coming to this country. Has had repeated attacks of his psoriasis, lasting for the last twelve years. On back, in an area about the size of the palm of the hand, are a number of grouped, small papulo-pustular syphilides; one inch above umbilicus, in medium line, is a dime-sized, ham-colored, non-scaly, non-itchy papule; at each parietal eminence is a slightly exulcerating, large gummatous deposit. At hair-line of forehead and neck are lesions covered with scales, very itchy. Three inches above umbilicus in median line is a dollar-sized, itchy lesion covered with silver scales.

#### Addison's Disease, Pre-constitutional Stage. By Dr. R. ABRAHAMS.

H. W., male, twenty-four, American, plumber. Two years ago, noticed that skin of face and back of hands were turning yellow. No other symptoms, except for occasional weakness, till May, 1907. Skin of face, forehead, ears, and hands dark yellow in color. Mucous membrane of mouth, lips, and conjunctiva, dark blue. No other manifestations of the disease. The case is presented as one in which the pigmentation precedes the constitutional manifestations by many years.

The consensus of opinion was not in favor of the above diagnosis; rather inclined towards lead or silver poisoning. DR. ABRAHAMS: "He had excluded both lead and silver poisoning, and was positive that the pigmentation was deepening in spite of all treatment."

M. G. PAROUNAGIAN, M. D.,

Secretary.

# REVIEW of DERMATOLOGY AND SYPHILIS

Under the charge of A. D. MEWBORN, M. D.

## INFLAMMATIONS

By HARVEY P. TOWLE, M. D., Boston.

**Hydroa Vacciniformis (Brazin).** Wolters. *Derm. Zeitschr.*, 1907, No. 5.

According to Wolters, but forty cases of this disease have been reported. Partly because of this rarity and partly because of errors of diagnosis it has not yet attained an assured position. Ehrmann in writing of hydroa vacciniformis divides its manifestations into two groups. In the first group—hydroa vacciniformis seu varioloformis—he places those cases in which the lesions are suggestive of vaccinia or variola, beginning as simple vesicles which are multilocular but which in later course become umbilicated, dry into a black crust and leave depressed scars. In the second group are placed those cases in which unilocular vesicles occur which do not become umbilicated and which leave either superficial scars or none at all. This type he calls hydroa æstivalis vesico-bullosa. Wolters believes that the difference between the two types is only one of degree. In his opinion well marked scars are produced by the vacciniform type simply because the inflammation is more intense and deeper-seated than in the æstivalis type, in which the scarring is superficial or lacking, because the inflammation is mild and superficial. He, therefore, considers hydroa vacciniformis and hydroa æstivalis vesico-bullosa to be only variations of the same disease. He quotes in support of his contention a case in which both types occurred in the same person. The patient, a woman, 32 years of age, had suffered since childhood from an eruption on the hands, face, upper breast and back, and occasionally on the lower legs, which was most marked in summer. From the time the patient was 3 years old until she was 16, the eruptions had recurred every spring or summer. From 16 to 24 years of age, there had been no outbreak. From the age of 24 to the present time there have been yearly recurrences which, however, have been less intense than the earlier outbreaks of her childhood. She had learned that exposure to the hot sun always brought on an attack and therefore carefully avoided exposure. The patient herself had noted differences between the early and later eruptions. She stated that the vesicles of the eruptions which occurred before she was sixteen were flatter, more sunken and by the third day at the latest had become dark colored, while the vesicles of the eruptions coming after she was twenty-four were yellowish and rounder. Formerly the crust was firm and black and left scars; lately it has been more yellowish, has separated

more quickly and has not always left a scar. When scarring has followed it has never been so deep as in the earlier eruptions.

The patient consented to expose an arm to the sun as an experiment. A few hours later an eruption developed upon the exposed part, made up of larger, superficial vesicles, which passed off without scarring, and of smaller, firmer and deeper vesicles, which left scars behind. Wolters excised lesions of both types and under the microscope found surprising differences in them.

In the larger and more superficial lesion, the firm, much widened, upper epithelial layers were lifted up, especially in the centre of the lesion. The rete was intact and did not show very marked change or much cell infiltration. The upper layers, which formed the floor of the vesicle, stained poorly. Some cells of these layers were swollen and their nuclei were shrunken, and a few showed degeneration. The cells of the epithelial layers forming the covering of the vesicle were not arranged in rows, were degenerated and showed but few nuclei, staining poorly. The nuclei of the stratum granulosum stained less well than usual. The contents of the vesicle were absolutely homogenous and apparently were purely serous. There were no septa. Leucocytes and lymphocytes were not present in large numbers, but eosinophiles were relatively numerous. Lymphocytes were collected in the corners in masses and bands. The inflammatory changes in the papillary bodies and in the corium were limited to a rather pronounced infiltration about the vessels.

The smaller, more solid and thicker vesicle presented essentially different features as in it the effects of pressure were more apparent. The roof of the vesicle was of about the same thickness as the other and was composed of layers of epithelial cells tightly pressed together. From the under surface projections of different lengths and shapes pushed out into the interior of the cavity. The nuclei of these projections and of the cells composing the roof scarcely stained at all. At the edges of the vesicle the floor was composed of epithelial cells, but in the centre the epithelium was gone, so that the greatly infiltrated papillæ were completely exposed. From these papillæ a thick, infiltrated mass projected straight up into the vesicle. The epithelium which still persisted in the corners also sent out offshoots into the cavity. The vesicle contents were homogeneous and devoid of threads or fibrin, but contained large collections of cells, especially in the portion above the exposed papillæ. The papillæ beneath the edges of the vesicle, where there were still remnants of epithelium, were greatly flattened and much infiltrated and the infiltrate had even been forced up into the epithelium. Beneath the centre of the vesicle, where the papillæ lay exposed, the infiltration penetrated deeply and surrounded the vessels in a thick, wide-spreading mass. Eosinophiles were almost entirely absent. Whether or not there was



thrombosis of the papillary layer could not be determined. The structure of the vessels was not greatly altered, although here and there the endothelial cells were swollen. Nowhere could the thrombotic, necrosed vessels, dilated into cysts, be demonstrated, nor were there any hemorrhages in the neighborhood.

In commenting upon the case, Wolters thought it interesting to note that the microscope showed in the later eruptions a diminution of intensity in a formerly severe process. He also considers it an important point that the eruption, returning after an interval of eight years, no longer produces umbilicated vesicles which left scars. Wolters believes that it is advisable to follow Möller's division of the disease into a vacciniiform and a vesico-bullous type without regard to whether the affection causes scarring or not. His case shows that both types may occur in the same case. In conclusion, Wolters states that, according to his conception, all forms are caused by the same etiological factors and the different manifestations are only the results of different conditions. He believes, further, that mild cases manifest themselves as a summer prurigo. An increased reaction produces large and small round vesicles, while in the severest cases the typical umbilicated lesions appear. All types can occur at the same time or can follow one another or can run into each other, according to the changes arising from the individual or causative conditions. Wolters would include the entire group of *hydroa aestivale* in the larger one of Crocker's summer eruption as distinct types of disease due to like causes.

**Erythema Exsudativum, Syphilis, Maligna Praecox with.** *Derm. Zeitschr.*, 1907, XIV, 115.

At the November, 1906, meeting at the Dresden-Friedrichstadt Hospital was shown a case of erythema exsudativum in combination with syphilis. A woman, 52 years old, with acquired syphilis, had had a roseola two months before. From the roseola papules developed suddenly a peripheral necrosis appeared about some of the papules. The energetic use of mercury, however, stopped further spread. In addition to the necrosis, there developed an erythema exsudativum multiforme which was considered as an expression of intoxication, probably with specific syphilitic toxines. These toxines flooded the organism, which was unable to form antibodies.

**Can Lichen Ruber Result from an Accident?** Heller. *Derm. Zeitschr.*, 1907, XIV, 127.

Heller was obliged to answer this question in the course of a law suit. A laborer had injured his hand while mounting a railway carriage. The wound healed slowly. Six or eight weeks after the injury an eruption developed upon the scar of the wound. Thence the affection



spread over the hand, body and extremities. Four months after the injury a physician had diagnosed the eruption as lichen ruber, basing his opinion upon the subjective symptoms (itching), the clinical symptoms and the successful arsenic therapy. Supported by this opinion the man claimed damages from his insurance company on the ground of disability resulting from the lichen ruber which, he further claimed, was in turn the direct outcome of the accident. The case was referred to Heller. His decision was that the lichen ruber present in this case could not by any possibility be considered to be the result of the accident. No subjective or objective symptoms had been noted which would point to either a psychical depression or a physical alteration of the nervous system which might have so lowered the resistance of the skin as to have created in it a predisposition to dermatoses. The plea that the trauma served as a port of entry does not apply as lichen ruber can not be considered as an infectious disease. Further, the well known tendency of lichen ruber to occur at any point of irritation is quite as well explained on the ground that the disease is a "diathetische dermatose," especially as other non-infectious and infectious diseases, such as psoriasis and syphilis, show the same peculiarity.

**Pityriasis Rubra Pilaris, Optalmo-Reaction Negative.** Courtellemont and Gastou. *Bull. de la Soc. Franc. de Derm., et de Syph.*, 1907, 398.

In March, 1907, a scaling eruption appeared on the last two phalanges of the second and third fingers of each hand. A few days later similar lesions appeared over both tendo-achilles. Thereafter the eruption spread rapidly either by extension or by the formation of new plaques. Eight days after the appearance of the first eruption the child was given a syrup containing the arseniate of soda and potassium iodide. On April 10 there was present an eruption of hyperkeratotic lesions which were most pronounced upon the palms and soles and which showed as smooth, shining, transparent plaques through which the bright red of the underlying derma could be seen. Here and there were also the more diffused, horny thickenings of the arsenical type. The lesions in the folds of the hands and fingers and over the heels and the soles were hollowed out into deep crevasses. The soles and sides of the feet were universally covered by the eruption, which also extended up over the achilles tendons. On the hands the eruption extended from the palms over the sides for a centimeter on the dorsal surfaces and also covered the dorsal surfaces of the last two phalanges of each hand. On the dorsal surfaces of both hands over the heads of the metacarpal bones were markedly erythematous, more or less cornified plaques. There were no follicular cones present on hands, fingers or toes. The nails of the fingers and toes were thickened from the beginning. On the elbows and knees were thick

red plaques. From the plaques on the elbows an erythematous band ran down the radial side of the forearm for three-fourths of its length, over which the folds of the skin were exaggerated and a fine desquamation was present. Similar but smaller plaques were present in the gluteal fold, over both buttocks, and both external and internal malleoli. Two finely scaling plaques were present on the chin, one in front of the left ear and two on the nucha at the hair line. The skin of the trunk was finely grained by numerous, small, pale projections which had appeared four or five days before. The mucous membranes were free. There was no pruritus or functional disturbance.

Under daily baths and the glycerole of ammonium at night the eruption subsided quickly, although it still preserved its characteristics. The after course of the disease was marked by exacerbations and remissions and the formation of new plaques. In May, follicular cones appeared on the first phalanges of the outer fingers, which occupied the sites of former keratotic lesions, and the more the keratosis diminished the more pronounced the follicular cones became. At first they showed merely as black points which were not elevated above the surface and which did not give a greater sensation but by the end of June they had become typical and have so remained ever since.

The authors remark that it is not impossible that the administration of arsenic early in the disease had aggravated the initial appearances, for several writers have noted the unfavorable influence of arsenic upon the disease. They also emphasize the appearance of erythemato-keratotic lesions on the hands where they were the predominating form of eruption. They call attention to the fact that so long as keratotic lesions were present there were no evidences of follicular cones and that these became prominent proportionately with the decrease of the hyperkeratosis; that the follicular cones did not appear until three months after the onset of the disease; that they began as non-elevated black dots, which became raised later on; and that they remained limited to the sites of previous erythemato-keratotic lesions.

With a view to clearing up the etiology of the disease, the ophtalmo-reaction of tuberculin was tried twice, once with one drop of a solution of 1:200 after Combry's formula, and ten days later with one drop of a solution 1:100 after Calmette's formula. Neither test gave a reaction.

**Pityriasis Lichenoides Chronica, The Recognition of.** Reicke. *Archiv. of Derm. u. Syph.* LXXXIII, 51; 205, 411.

In this long article of fifty-six pages, Riecke discusses the nosology of the cases grouped by Brocq under the title *Erythrodermic exfoliantes disséminées*, giving especial attention to the group which he calls *pityriasis lichenoides chronica*. Great confusion exists in regard to these exfoliating erythemata partly because, on account of their comparative rarity, many

know the diseases only through the literature. In consequence many scaling affections are unwarrantably grouped together. Even Brocq, he states, has collected under the title of Parapsoriasis a large number of exanthems whose morphology, evolution and histology do not justify such a broad conception.

Riecke divides the types which he considers in this article into three groups. I. Pityriasis lichenoides chronica, which is identical with Jadassohn's dermatitis psoriasiformis nodularis and Neisseur's lichenoid exanthem. II. Parakeratosis variegata of Unna, Santi and Pollitzer, which is apparently the same as Crocker's lichen variegatus. III. Erythrodermie pityriasique en plaques disséminées of Brocq. According to Riecke, Brocq, in 1902, stated that he would include under the title Parapsoriasis three types: 1. Parapsoriasis en gouttes (corresponding to Jadassohn's type). 2. Parapsoriasis lichenoid (corresponding to the Unna-Crocker type). 3. Parapsoriasis en plaques (corresponding to the Brocq-White type). Various transition forms exist and the different varieties show a strong relationship to psoriasis, lichen and seborrhœa.

After enumerating the published cases and commenting upon them briefly, Riecke reports three cases of pityriasis lichenoides chronica of which, he says, but twenty-five undoubted cases have been previously reported. In summing up the detailed accounts of his three cases, he calls attention to the fact that the eruptions are characterized by two types of lesions. The first type is a salmon colored, sharply defined, nodule, with a flat elevation, of moderate density and which on pressure leaves a yellowish infiltration behind. The second type is macular. This is less well defined, varies in size from a hemp-seed to the finger nail, is yellowish or brownish red, usually shows a loose, whitish desquamation, is devoid of all infiltration and occasionally leaves a yellowish tinge on pressure. Mechanical irritation invariably increases the scaling. In addition to these two types, there are other lesions showing characteristics of both.

The histological changes agree with those generally found in pityriasis lichenoides chronica—retention of nuclei in the horn cells, moderate cell infiltration of the papillæ, leucocytic invasion of the lower layers of the epidermis, marked elevation of the nodules on the one hand and a slight depression in the macules on the other which had every appearance of a retrograde process in a nodular eruption.

The primary eruption is a bright red, projecting nodule about the size of the head of a pin, surrounded in only its earliest stages by a narrow inflammatory zone. This nodule becomes broader, flatter and paler and, exceptionally, attains the size of a split-pea or the little finger nail. It shows all shades of color from orange yellow to brown-red, according to the age and seat. Many lesions of the brown-red type show a blue-red, somewhat depressed centre, while many other papules show a



superficial della. When a papule is scratched, it is a characteristic that the top is removed entire in a thin laminated piece. Rarely does it split into small fragments. As the papule involutes it shrinks until there remains nothing of it but a projecting heap of scales. Beneath the scales is a smooth, bright red surface apparently moist, yet without pronounced serous exudate. Capillary bleeding is not a constant feature but is most often present in the early, inflammatory papules. When present it is less marked than in psoriasis. Most papules leave a yellowish red color behind on pressure. In the final stage they disappear without leaving a trace. Confluence of the nodules is exceptional. There is no tendency toward atrophy. Neither the sweat or sebaceous glands are involved.

As to the macular form, the lesions vary in size from a hemp seed to a pfennig, but occasionally the macules run together to form plaques of various shapes and sizes up to those as large as the palm. As a rule, the macules bear scales which are often silver white, shining, in thin lamellæ and thicker and more adherent in the centre. Occasional macules appeared to be without scales. The surfaces of such macules appeared to be traversed by fine folds, giving them a rumpled appearance. Mechanical irritation immediately brings out a visible scaling. The macules are directly descended from the papules from which their development can be followed through the intermediate forms downward. The macules therefore mark the end stage in the evolution of the eruption. The development of the eruption is gradual. The course of the disease is chronic and marked by exacerbations and remissions. So far as known the disease is incurable.

**Pityriasis Rosea Urticata.** Vörner. *Archiv. f. Derm. u. Syph.*, 1907, LXXXIII, 203.

Vörner reports a case of pityriasis rosea in which the lesions showed at the outset a marked urticarial tendency. The eruption appeared upon the body, accompanied by a lively itching and burning. Scattered over the trunk were small, almost miliary, bright red, markedly projecting papules, which were of a strikingly urticarial character. The lesions rose quite abruptly from the skin. Their surfaces were covered with a dry, rather smooth horny layer. The edges desquamated slightly. The centres were covered with fine folds and ridges and were of a yellowish color, while the borders were red. The lesions were firm and none showed any central softening or depression. Upon the following day the urticarial appearances had disappeared and the eruption presented the ordinary characteristics of pityriasis rosea. While wheal formation in the axillary and genital regions is not uncommon in pityriasis rosea, Vörner believes that such abundant urticarial manifestations upon the trunk are unique. He ascribes the wheal formation to the intensity of the process, instancing similar appearances encountered in syphilitic roscolæ in intense infections.



## BOOK REVIEWS.

BIER'S HYPEREMIC TREATMENT, by WILLY MEYER and SCHMIEDEN. Octavo of 209 pages, illustrated. Philadelphia and New York, Saunders Co.

The authors devote one page to the use of Bier's methods in dermatology. Eczema, acne, psoriasis and diseases of the nails are mentioned as benefited by this treatment. That there is no better method of treating keloids than by obstructive hyperæmia is also claimed. The treatment of lupus vulgaris and alopecia areata by suction cups is advocated. The method finds its most brilliant results in the treatment of deep-seated furuncles. The book is well illustrated and makes a handsome addition to a medical library.

SYPHILIS ET CANCER, by DR. RENE HORAND. J. B. Ballière et Fils, Paris, 1908.

The relation of syphilis to cancer is the subject of this little volume and the author defends the position taken by Audry, Fournier and others that syphilis in some individuals predisposes to cancer. Cancer is known to develop upon syphilitic leukoplakia and upon other syphilitic lesions in activity or cicatrized. In 1904 Horand described a hemoprotozoa as causal agent of syphilis which met almost no recognition until more recent investigation of Vuillemin, Badin, Krzystalowicz and others have shown that the *treponema pallida* is probably a transformation stage of a hematozoa or sporozoa—the true parasite of syphilis. The evidence to support the close etiological relationship of certain sclerotic forms of syphilis to cancer is even greater than the evidence in favor of syphilis as the cause of tabes, hence the importance of preventing mucous membrane irritation in syphilis so as to prevent sclerotic forms of syphilis and the value of intense mercurial treatment rather than the iodides in lesions of the tongue where the diagnosis lies between syphilis and cancer. Horand recommends hypodermic injection of gray oil (Lafay) given in .05 to .07 centigrams once a week. If after two to four weeks the lesion does not show amelioration, a radical surgical operation is indicated.

THE SKIN AFFECTIONS OF CHILDHOOD, WITH SPECIAL REFERENCE TO THOSE OF MORE COMMON OCCURRENCE AND THEIR DIAGNOSIS AND TREATMENT. By H. G. ADAMSON, M. D., Lon., M. R. C. P. London, H. Frowde. 1907. Pages, 287. Plates, 12.

When we remember Crocker's classic work on Diseases of the Skin in which under nearly every subject there are one or more sections given to the description of the variations of the disease when seen in children, we can but ask ourselves: Is there need for this little book? The answer is: There are perhaps many interested in pediatrics who do not care to purchase an expensive book on dermatology to whom this small one will prove useful. The author's preface is most modest. He makes no pretension to having written an exhaustive treatise, and forestalls adverse criticism by acknowledging "many shortcomings."

The diseases are classified "as much as possible" on an etiological basis, such as affections of congenital origin; eruptions due to local physical causes; eruptions due to animal parasites; affections probably of local microbic origin, etc.; and last of all, unclassified affections, under which are placed eczema, psoriasis, pityriasis rosea, lichen spinulosus, annularis, and urticatus, pemphigus, prurigo, urticaria pigmentosa, and alopecia. The sections on the various forms of impetigo; on eruptions about the "napkin region," a clever term; on lupus, and on ringworm are specially good. Many diseases are dismissed with scant courtesy, such as prurigo to which but little more than half a page is given. Differential diagnoses are not detailed as fully as they might be; and the treatment of most diseases is meagre,

as, for instance, that of eczema, for which almost the only drug mentioned is oxide of zinc, and not a word is said about the management of chronic forms.

While there is little in the sections treating of the different diseases that is not to be found in recent text books of skin diseases there is much food for thought in what may be called the introductory sections that are freely scattered through the book. It is in these sections that the author reveals himself as a master hand, and an acute observer. In his tendency to elevate certain symptoms into distinct diseases, such as lichen urticatus, and several of his forms of pityriasis, he seems to show the influence of his French neighbors. What we need is rather to reduce the number of our diseases than to multiply them. The publishers have done their part well. The type is good, and the book is neatly bound in flexible covers.

ESSENTIALS OF MODERN ELECTRO-THERAPEUTICS. By FREDERICK FINCH STRONG, M. D., New York. Rebman & Co. 1908.

This little book of some 112 pages is what its author modestly states, that is "an elementary text-book on the scientific therapeutic use of electricity and radiant energy."

After giving the modern theories in regard to electricity with its electrons, ions, ether waves, etc., he discusses physiology from the electrical standpoint, and describes the various kinds of batteries and means of evoking radiant energy, such as Crooke's tubes, the high frequency apparatus, and the many kinds of lamps used for therapeutical purposes. The illustrations, which are many, add greatly to the value of the book.

The methods of using galvanism, faradism, electrolysis, high frequency currents, and phototherapy are described in an elementary manner, sufficient for the student beginner, but of little use to him who would treat cases. But then the author makes no pretension to having published a treatise. He has presented the subject of electricity as clearly as it is possible to do with a subject about which there is so much of theory, and so comparatively little actual knowledge.

G. T. J.

# THE JOURNAL OF CUTANEOUS DISEASES

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## DERMOLYSIS — AN UNDESCRIBED DISSOLUTION OF THE SKIN.

By CHARLES J. WHITE, M. D., Instructor of Dermatology in Harvard University.

**O**N February 21, 1908, a man was referred to the Skin Department of the Massachusetts General Hospital from the Orthopædic Room, where he was being treated for an acute synovitis of the knee.

This man was born in Russia twenty-five years ago, and has worked in a bakery for years. His history may be unreliable although obtained at his two visits through the interpretation of two different well educated medical compatriots, but the man was hopelessly indifferent and totally uninterested in his cutaneous disease which caused him neither pain nor mortification.

About ten years ago the man was apprenticed to a baker in Russia and following the custom of the country was obliged, during the eighteen months of his apprenticeship, to sleep with his companions in a low-ceiled room on top of the heated brick and mortar oven. Since that time he has continued his occupation of baking, but now enjoys a more hygienic bed.

The first lesions of his present dermatosis are said to have developed during, or shortly after, his apprenticeship, but judging from appearances, certain lesions are of a much more recent date. The patient thought that possibly some of the early nodules might have disappeared, but no corresponding scar tissues or atrophic points could be found. There were apparently no subjective symptoms and firm pressure could produce no signs of pain. The process was limited to the elbows and to the supra-patellar regions of the thighs. There were many nodules on the right elbow and on the left thigh, while the corresponding sites of the other limbs were but scantily affected.

The lesions varied from three to ten millimeters in diameter. The early papules were of a cherry color, round, dome-shaped, firm and rather tense and freely moveable in the skin. Younger lesions

were about four millimeters in diameter, round, flat or even depressed on top, muddy white in color and softer than their younger companions. Both of these varieties were comparatively sparse, but isolated and appearing without any fixed relation to the more conspicuous elements of the disease, that is, some had developed at the periphery of the affected areas and some in the center between the lesions about to be described. The youngest lesions, most striking because of their relative numbers, size and formation were approximately ten millimeters in long diameter and were composed of peripherally set, contiguous but distinct, flat-topped, muddy white, softish papules, one and one-half millimeters in diameter, arranged in an oval or circle around a central, blue-red, relatively sunken, velvety skin. This contrast in color was most evident when the skin over the nodules was put on the stretch and then in a way the whole arrangement suggested a sapphire brooch surrounded by pearls.

No suggestion whatever of suppuration was discernible in any existing lesion and as stated above no evidence of cicatricial or atrophic tissue could be found, unless one is to regard the central blue-red portion of the oldest lesions as evidence of atrophy. In other words, the evolution of the disease seemed to be peculiarly sluggish and this quality was manifested only by the further growth in extent of the more mature simple and compound lesions, accompanied by loss of color, refraction and density. Pricking of several of the lesions of all varieties with a large needle followed by firm pressure produced nothing but a droplet of dark blood and this procedure seemed to be rather strikingly painless.

With such data at hand what possible diagnosis could be made?

1. Adenoma sebaceum seemed improbable on account of the seat of the disease and on account of the size of the older lesions and their gradual tendency toward flatness and grayness of tone.

2. Benign cystic epithelioma in all its various pathological subdivisions seemed unlikely, because of the position of the lesions and their progressive change in consistency and hue.

3. Colloid degeneration, although so rare an affection, was considered a decided probability in many ways, but the hitherto unrecorded site of the process (all previous cases being associated with exposed parts), the absence of the characteristic translucent, orange-yellow color, the age of the patient, and the failure to squeeze the usual jelly-like mass from the pricked papules obliged one to defer



the possibility of a final decision until after the microscopic examination.

4. Degeneration of elastin is often observed histologically in connection with various cutaneous diseases (lupus erythematosus, X-ray dermatitis, senility, scars, etc.), but usually the preponderating dermatosis determines the clinical aspects of the case. Dreuw (*Monatsh. f. Prakt. Derm.*, Vol. 36, p. 629), however, once described an instance where this selective degeneration was the only pathological factor present, but in his case the degeneration produced clinically confluent crusts on a reddened, swollen, ulcerated base and therefore such a conception was impossible in the present instance.

5. Leiomyoma appeared doubtful, because the situation of the process was unusual, because the frequent characteristic symptom of paroxysmal pain was absent and because the older growths were muddy white in color.

6. All forms of lichen could be ruled out probably on account of the duration of the malady and the absence of pruritus.

7. Lymphangioma tuberosum multiplex (Kaposi) has hitherto been associated with the trunk, but the final decision on this point was deferred until the histological details were made known.

8. The "multiple and benign tumor-like growths" pictured by Schweninger and Buzzi (*Internat. Atlas of Rare Skin Dis.*, part 5), were white, but they appeared on the shoulders, back and thighs and underwent an atrophic evolution, followed by scars [and the loss of elastic tissue microscopically]. Therefore, this idea was untenable.

9. Pseudo-xanthome élastique, described by Darier, consisted of light gray or yellowish papules, non-infiltrated, just jutting above the skin and associated with the later stages of phthisis pulmonalis. [Histologically characterized by prominent granular masses of elastin (an elastoma) in the upper or middle corium and accompanied by giant cells]. Again an impossible diagnosis in the present case.

10. Sarcoids could be clinically discarded because of the long continuation of the process and the color properties of the older lesions. [Histologically by the absence of the characteristic cellular invasions].

11. Sarcoma of all varieties were not to be thought of on account of the benignity of the disease and the gray coloration and flattened surface of the mature lesions.

12. All of the smaller type tuberculides could be excluded by the total lack of necrotic degeneration and marked atrophic or cicatricial sequelæ.

13. Xanthomata of any type could be eliminated by the absence of the pathognomonic yellow or red and yellow lesions. [Histologically because none of the peculiar giant cells were present].

Most of the above diagnostic possibilities were considered during the examination of the man, and he was afterwards presented to the Boston Dermatological Society, but after a full discussion of the case, no member wished to hazard a definite opinion.

Fortunately, the man consented to a biopsy, and at his first visit a young pink nodule from the arm was excised.

#### HISTOPATHOLOGY

The specimen was cut in three pieces, hardened in Zenker's fluid and imbedded and cut in paraffin.

*Mallory's Hæmatoxylin-phosphotungstic acid.*

A series of eight sections was stained by this method.

*Epidermis.* Stratum spinosum. The palisade layer was well differentiated, the cells assuming the normal vertical position, although perhaps rather longer than usual. The lower boundary was in places continuous and sharply separated from the corium, while in others the line of demarcation was indistinct and interrupted. The rete proper presented numerous deviations from the normal. The lower half of the layer was composed of polygonal cells, whose nuclei were vesicular and very large, occupying most of the cell contents. The nuclear protoplasm was very scanty, containing but little substance beyond a well marked nucleolus and several granules of chromatin. Occasional mitoses were seen. The intercellular spaces were very narrow, the cells being practically contiguous, but retaining their spines. Here and there nuclei had disappeared, leaving vacuoles. The upper half of the rete was composed of horizontally-lying cells, for the most part minus their nuclei; but there was no vacuolization, the protoplasm closing in and filling the space formerly occupied by the nucleus.

The stratum granulosum was absent entirely. There was no

suggestion of granular cells or even of granules, in fact, the layer could be properly described as non-existent.

The stratum corneum was present and exhibited no noteworthy abnormalities.

*Corium.* Papillæ were not numerous or as elongated as would be expected in this region of the body. Consequently, papillary vessels were rather inconspicuous, but when present appeared sufficiently normal. Subpapillary vessels were even less prominent.

The essential lesion of the disease could be best described as a rarefaction of the corium from the subpapillary layer downwards. This change seemed to be comparatively sharply demarcated laterally, not by any straight vertical boundary perhaps, but nevertheless the change from the normally abundant, rather dense wavy lateral bundles to the rarefied, broken, delicate, short central fibres was quite abrupt from a vertical point of view. In this abnormal area staining reactions and chemical affinities were apparently normally preserved—collagen and elastin received the acid reagents typically and the epithelial structures likewise absorbed the basic stains unchanged. The disease evidently consisted of a physical alteration—in other words the sections gave the impression that some unknown factor had caused a diminution in the number and size of both the ecto- and ento-dermic structures. Perhaps one might think from a superficial examination of one section that the hardening had not been perfect in this rarefied area of the skin, or that the microtome knife had injured it. So a single section might look to a casual observer but interrupted serial sections from the original three parts of the excised papule disclose this pathological change (and then continuously) only in the middle portion of the papule. The epidermis, however, remains abnormal throughout the whole three portions.

Under oil magnification the abnormal area showed: 1st, normal elastin, less in quantity than normal and each fibril small; 2d, empty lacunæ of irregular shapes and of considerable size; 3rd, lacunæ containing coagulated and reticulated fibrin with occasional free pigment granules in cross and longitudinal sections; 4th, areas where collagen existed as delicate fibrillæ but staining sharply and looking as though it had been "teazed out"; 5th and most prominently, an extensive area of distinctly separated, broken, wavy, short, normally staining collagen with well preserved nuclei; 6th, isolated small groups of sharply tinted lymphocytes, occasional free, somewhat vesicular, often large connective-tissue nuclei, and here and there

a small vessel whose endothelium was emphatically swollen and whose perithelium was invaded by lymphocytes. Thus the whole of this area resembled a hypoplastic structure, the elements of which had been diminished and separated by some physical rather than chemical force.

The more healthy portions of the corium under the highest magnification presented normal collagen and elastin, but also peri- and end-arteritis. These diseased vessels were surrounded by lymphocytes, while their lumen was much encroached upon by endothelial swelling which in some of the smaller branches had advanced to total occlusion of the channel. Such vessels were seen at all levels, but most prominently in the middle and lower strata. Polynuclear cells, mast cells and plasma cells were absent.

In both the abnormal and comparatively normal areas of these eight sections sebaceous and sweat structures were nowhere visible.

#### HEMATOXYLIN-EOSIN

In this series of thirty-two sections the extraordinary time needed, even with a very ripe solution, for the hæmatoxylin to penetrate the basic elements was noteworthy. These secretions were from the very heart of the papule and throughout their extent there were many rete cells whose nuclei had shrunk, leaving wizened, distorted figures surrounded by empty halos.

Staining by this method revealed important details apparently too subtle for the phosphotungstic acid to differentiate. Here it was evident that chemical instead of physical changes had been at work in the production of the disease. Throughout the corium there were the same dissociated connective tissue fibres which marked the process in the sections stained by Mallory's method, but here various steps in the possible evolution of the disease could be noted and followed. There were: 1st, numerous disrupted, short, normally staining collagenous bundles and fibres; 2nd, numerous bundles of fibres which received the acid eosin in their inner fibrillæ, while the outer layer absorbed the basic hæmatoxylin, and this was prettily demonstrated in certain spots which resembled induction coils with inner cross-cut normal acid fibrillæ and outer surrounding longitudinal basic strands (This arrangement is unusual. In such instances it is usually the innermost fibres which first undergo this change); 3rd, certain areas, especially prominent in the depth of the sections, where the fibres received the blue stain wholly without any suggestion of the normal acid affinity; 4th, considerable spaces where the constitu-



ents of the corium had dwindled into cloudy, faintly basic-staining meshwork, the exact nature of which was difficult to determine (was it fibrin or was it colloid degeneration?); and 5th, empty lacunæ (the end stage of the process?), some of which contained minute and basic-staining rings, the last remnants of capillaries or sweat glands.

In this series of sections well-preserved sweat glands were observed in the normal portions of the cuts, while muscular bundles could be seen both in the normal and in the abnormal areas.

#### EOSIN-ALKALINE METHYLIN BLUE

Throughout this series of eight sections nothing further was revealed.

#### ACID ORCEIN

These seven sections deeply stained with this selective elastic tissue dye present still further interesting details. As a whole this substance is diminished in quantity throughout the entire depth of the corium and is also arranged in a peculiar manner. Below the sub-papillary layer there are long, parallel strata running across the whole section but diminished in quantity in their transit through the area of rarefied and modified collagen. Between these prominent layers the elastic tissue is still further diminished in amount. The parallel strata are also conspicuous on account of their composition and consist of fine, compact, dark-brown, tortuous fibrillæ (elastin) accompanied by coarse, swollen elements much lighter in color and less twisted in form.

We are not confronted here with elacin which absorbs basic-stains for this abnormal substance was not found in the hæmatoxylin-eosin sections, but we are dealing with the rarer substance, collastin, and we have again found in this puzzling dermatosis a constituent of the corium distinctly altered physically and chemically.

With such histological findings in what appeared to be the earliest type of papule it was thought that the examination of the maturer lesions would reveal more conclusively the true nature of this obscure disease. After much bargaining the man consented to a second biopsy and an isolated, muddy-white papule and a section of a compound lesion (including outside normal skin, muddy-white papule and central, velvety, blue, depressed skin) were excised. It must be confessed that these more advanced lesions were expected to demonstrate unquestionably that colloid degeneration was the

cause of this disease, but, unfortunately, the examination of 124 sections from these later excisions revealed positively no greater degree of chemical change.

The histological picture was the same, save that dermal epithelial structures, surrounded by very marked mononuclear cellular invasions, were more in evidence and the disintegration was more pronounced physically both in the muddy-white papule and in the central bluish skin.

In summarizing the results of this rather detailed description, what are the salient points? We find clinically pea-sized, dome-shaped, cherry-colored papules, which apparently evolve into hitherto undescribed flattened, muddy-white lesions, isolated or grouped around a relatively depressed, bluish-red, velvety centre. These features are of long standing, developed originally on non-exposed areas of a boy's skin and have remained unassociated with all subjective symptoms. Histologically we note: conspicuous epidermal changes: endarteritis; peri-vascular, peri-follicular, and peri-glandular lymphocytic infiltration; basophilic collagen; collastin; general diminution of collagen and elastin; and lastly, gradual disappearance of all these structures focally.

In an early part of this paper it was demonstrated that no well recognized dermatosis, with the possible exception of colloid degeneration, could be identified with the present lesions from a clinical point of view, and now that the pathological nature of the present disease has been revealed are we nearer our goal, can we place these baffling lesions in any hitherto recorded niche? I fear not.

A very thorough search through past literature has failed to disclose any exactly similar condition, but, of course, such unexplored paths are poorly blazed and a previous, possibly isolated, unduplicated title may have failed to find its proper place in our dermatological catalogues.

The closest analogues are the following: Graham Little (*Brit. Jour. Derm.*, 1904, p. 137), describes a "number of flat, light cream-colored patches, the largest being 2-3 mm. across, the smallest 1 mm., very slightly raised from the surrounding skin." Later (*loc. cit.*, p. 177), this same author reports that histologically these papules showed "an area immediately below the papillary zone in which the collagen bundles stained differently to the collagen in other parts. It was possible that this indicated a degeneration of the collagen in patches corresponding to the position of the tumors." This case seems to correspond in some ways to the one under dis-

cussion, but Little mentions no rarefaction of the corium and tells but little about the chemical nature of the collagenous metamorphosis.

Dubreuilh (*Annales de Derm. et de Syph.*, 1906, p. 569) relates the history of a woman of forty-four who presented an eruption of nine months' duration accompanied by slight pruritus. The disease began on the forearms and gradually spread over her arms and back, and consisted of follicular pale miliary nodules, ("blanc-mat") slightly yellow, with smooth surface, 1-2 mm., in diameter, very hard and lying in a perfectly normal skin. Eventually these papules coalesced and terminated in scleroderma. Histologically the early nodules presented a peri-follicular rarefaction of the corium, the collagenous bundles of which stained palely. The author gives to this anomalous condition the title "fibromes miliaires folliculaires." Again, we can select certain similarities in the two cases, but we can go no further in trying to harmonize them completely.

Balzer (*La Pratique Dermatologique*, Paris, 1904, vol. 4, p. 794) tells us that microscopically the linear depressed scars which follow pregnancies consist of drawn-out and dissociated collagen and elastin with a relative thickening of these structures in the surrounding normal skin; but once more the similarities in the two processes are limited.

Histological details of senile skin, certain cicatrices and myxœdema (see Unna, *Histopathology of the Diseases of the Skin*, Walker's Translation, 1896, p. 976 et seq., p. 991 et seq., and also Krzyształowicz, *Monatsh. f. Prak. Derm.*, 1900, vol. 30, p. 265) are analogous to the microscopic details of the present case, but, of course, there can be no questions of these conditions clinically.

And lastly can we reconcile the present dermatosis with our meagre conceptions of colloid degeneration? Undoubtedly the histology of the two processes have many details in common as will be seen from the following quotation from Bosellini (*Annales de Derm. et de Syph.*, 1906, p. 761) "as a stage in the evolution of the disease before arriving at the final product, colloid, we find masses of collastin and finally, perhaps, collacin, represented by the central basophilic substance of the clumps of degenerated collagen . . . That which is never produced is elacin . . . In the colloidal degeneration the alterations affect the cells, although tardily, so that one finds them well preserved and clearly stained around and in the midst of the collagen, but they finally disappear also."

Despite this somewhat parallel histological picture it seems impossible to call the present disease colloid degeneration, for microscopically the disintegration does not terminate in colloid masses but seems to be represented by an utter disappearance of the corium, while clinically the papules appeared in a boy on non-exposed parts and did not present themselves as translucent, orange-colored lesions, from which a jelly-like matter could be expressed.

What, then, is to be the final word concerning this dermatosis which seems to stand without a precedent in our present dermatological literature. As a title I have coined the word *dermolysis*—a dissolution of the derma—and as histologically in colloid degeneration and often in senile skin we find basophilic collagen, collastin, and a relative persistence of the cellular elements, etiologically the result of long-continued exposure to the action of light, heat, and possibly cold, so here we find the same chemical microscopic changes due perhaps to the subjection of the skin, during the boy's apprenticeship, to the extraordinary and intimate exposure to heat while sleeping night after night on a glowing oven and, in later years, to the possible further action of heat plus light in the recurring blasts from the open doors of his hot bakers' ovens. And, furthermore, as we note endarteritis in chronic X-ray dermatitis, so here we find a similar pathological change in a skin exposed by habit to intense light and heat.

In conclusion, I wish to thank my colleague, Dr. H. P. Towle, for the photograph which illustrates the clinical features of the case, and especially Mr. L. S. Brown, photomicrographer to the Massachusetts General Hospital, for the really perfect pictures which demonstrate better than my faulty words its interesting microscopical details.

#### DESCRIPTION OF PLATES

FIG. 1. The macroscopic lesions.

FIG. 2.  $\times 75$ . A dome-shaped, cherry-colored papule. Note the apparent absence of nuclei in the rete; the real absence of granular cells; the focal disintegration of the corium with the relative persistence of cellular elements.

FIG. 3.  $\times 1500$ . A section of the rete. Note the relative increase in size of all the nuclei; the decrease in protoplasm of most of the nuclei; the distortion of some of them; and the total disappearance of others, with final loss of their cell boundaries.

FIG. 4.  $\times 310$ . A central area of the corium where the disintegration is only partial. Note the great decrease in density of the collagen; the lower darker areas of basophilic collagen; the foci where fibrous tissue is reduced to a fine mesh-work; other areas where it has entirely disap-





FIG. 1.

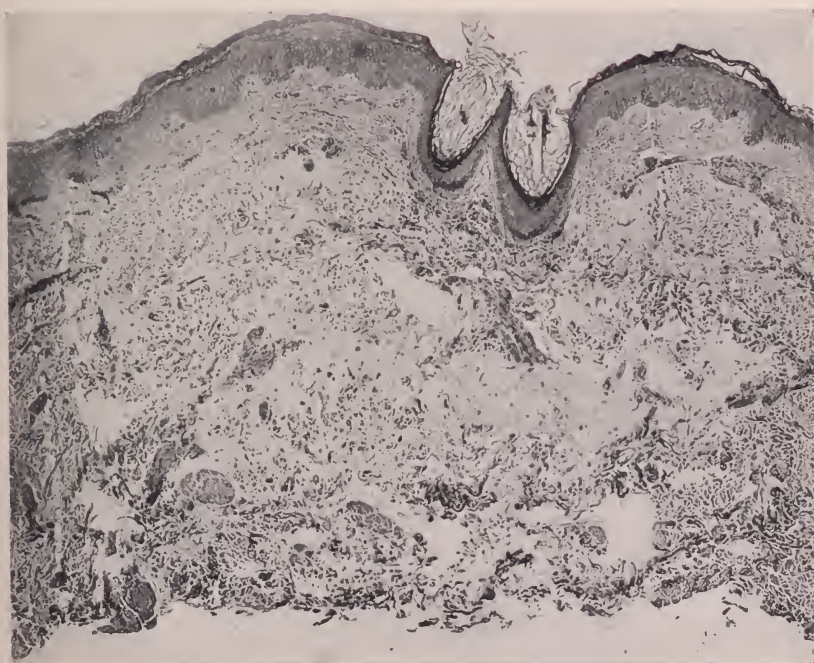


FIG. 2.



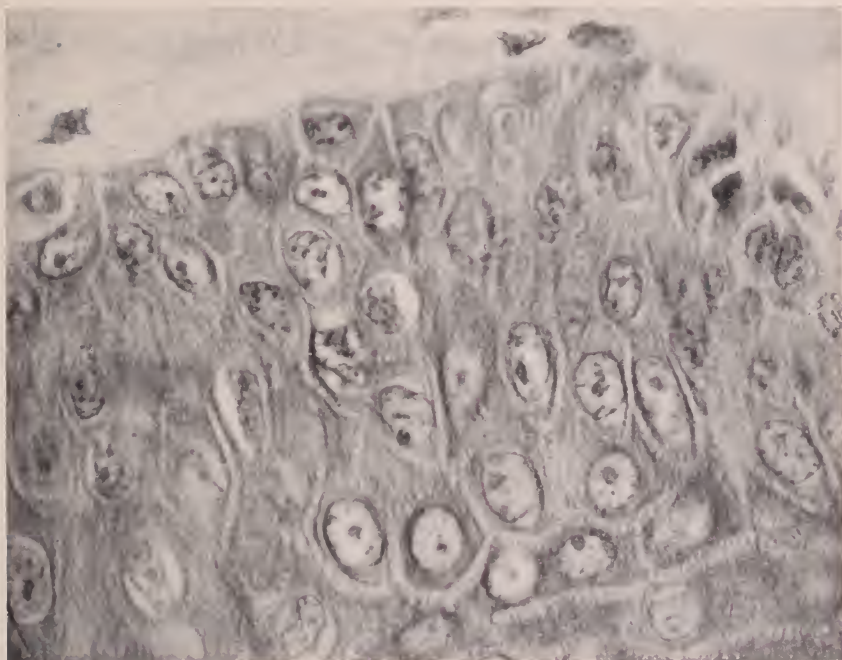


FIG. 3.

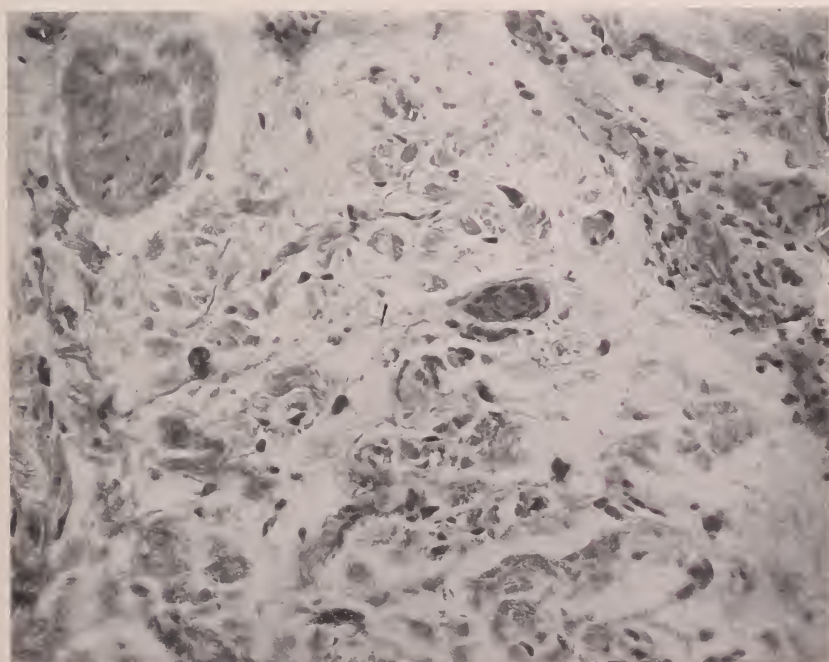


FIG. 4.





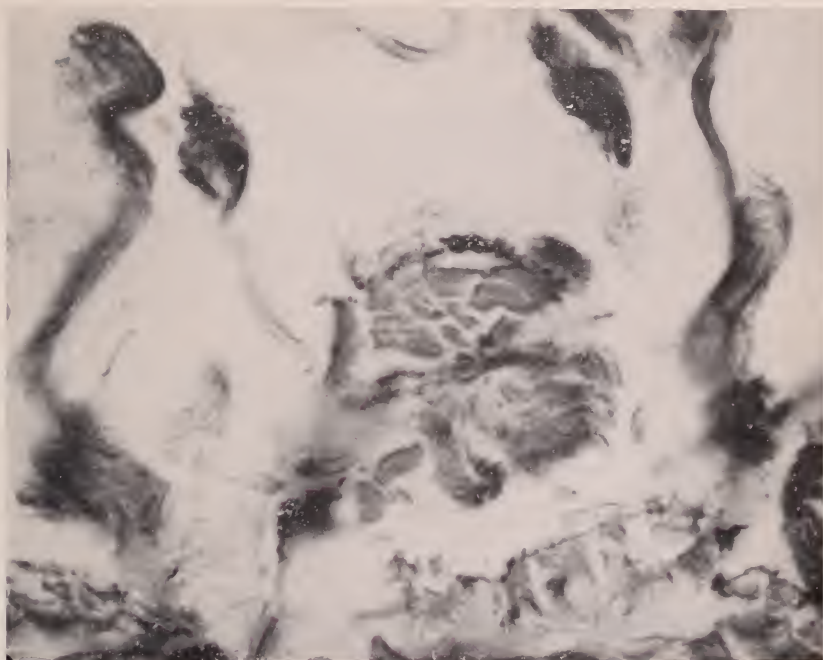


FIG. 5.

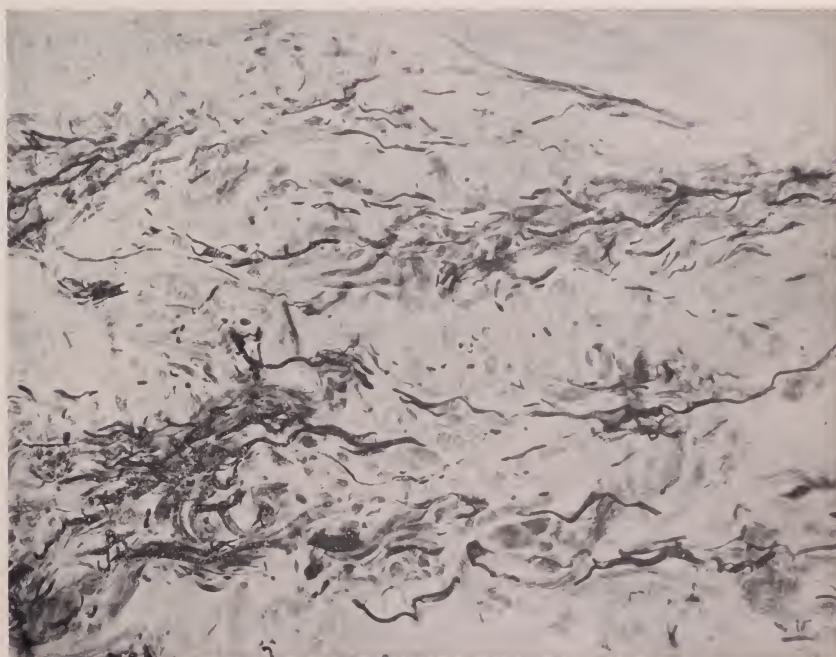


FIG. 6.



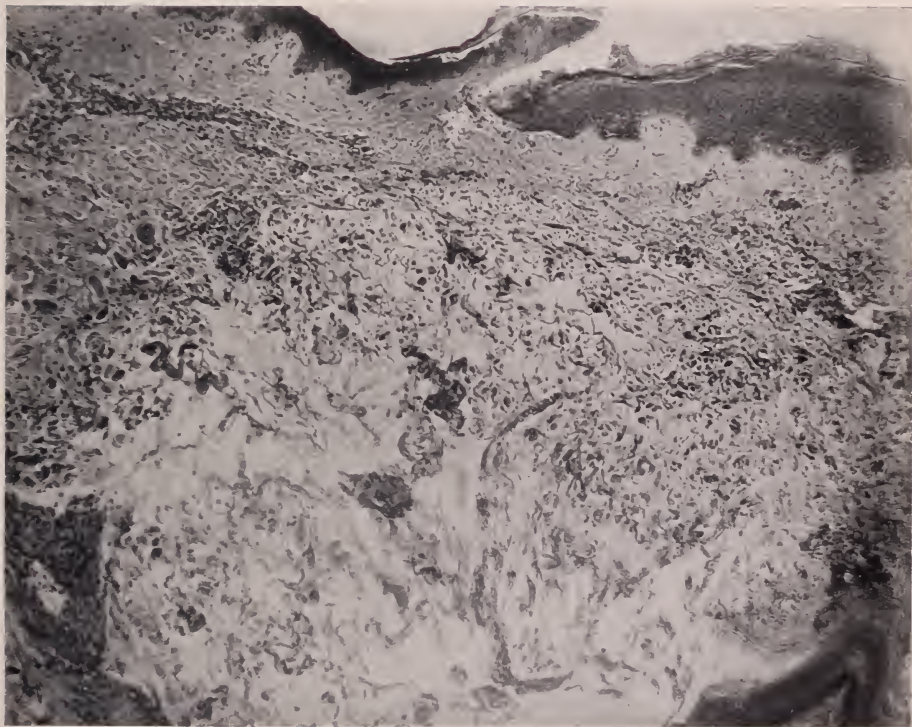


FIG. 7.





peared; the persistence of muscle (upper left corner) and blood vessels with surrounding lymphocytes (upper right corner); and two crystals (upper middle), which Unna refers to in connection with myxœdema.

FIG. 5. x1500. The depth of the corium, demonstrating the basophilic collagen, and the great disintegration of the area. The lighter parts of the tissue are the normal acidophilic fibrils; the darker portions are the abnormal basophilic fibrils. Note in the center the induction-coil arrangement of the fibrous tissue with the central cross-cut eosin particles and the outer longitudinal hæmatoxylin fibres. This primary external degeneration is contrary to the experience of Unna and others.

FIG. 6. x310. The middle strata of the better preserved portions of the corium, illustrating most clearly the normal faintly tinged collagen, the black-brown, clear-cut fibres of elastin, and the rare, swollen, less tortuous, pale brown accompanying masses of collastin. Note also the unusual stratification of the elastic elements.

FIG. 7. x75. Section of the relatively depressed bluish center of the compound lesion. Note the much more advanced dissolution of the corium, the swollen, partly basophilic collagen, and the comparative resistance of the enclosed epithelial elements.

## ICHTHYOSIS OR ACANTHOSIS—WHICH?

By W. W. ROBLEE, M. D., Riverside, Cal.

A Further Report on the Case Reported as Ichthyosis of Unusual Location, in the *Journal of Cutaneous Diseases*, July, 1907.

THE patient, acting upon advice received from his attending physician, removed to Southern California in the spring of 1907, and has been under the care of my associate, Dr. A. S. Parker and myself since that time. The present condition is as follows:

The face is darker than that of the average person, appearing to be deeply tanned, as if it had suffered long exposure to the sun; it is studded with numerous pigmented moles and warts. The skin about the inner folds of the lower eyelids is somewhat thickened, and a pigmented area surrounds the eyes. There is a slight thickening of the skin about the angles of the mouth. The skin of the neck, axillæ, region of the nipples, the abdomen above and below the umbilicus, the flexor surface of both arms and bends of elbows, both groins, flexures of knees, the surface of the back to some extent, and the genitalia is deeply pigmented and thickened.

The skin has an oily, velvety or spongy feeling; the natural lines and folds are greatly exaggerated, some of them being very deeply fissured. These fissures do not crack irregularly into polygonal or other plate-like formations. There are no raw or excoriated places, even at the bottom of these fissures—in fact there are no unusual or irregular lines or fissures, the natural lines of the skin being preserved, but their depth is very much exaggerated.

The appearance of the skin at the present time is very well shown in the cuts which illustrated the former article, and the photograph accompanying this article. I would suggest that in studying the photograph, a reading glass be used, when the characteristic lines and fissures are beautifully shown. The photo also shows the small papillomatous growths on the face, which are so characteristic of this disease.

A portion of one of the hypertrophied ridges in the axillæ was excised by me, a section prepared by Dr. T. R. Griffith, and a micro-

photograph made. The photograph, as will be observed, is typical of a papillary skin hypertrophy. There is no scaling of the superficial layers as is shown in ichthyosis. The pigmentation is also clearly shown in the photograph.

The condition is manifestly an hypertrophy of the papillary layers of the skin, in which is preserved the natural lines. There are numerous small, deeply-pigmented papillomatous growths, none more than 5 mm. in diameter, scattered over the affected area, especially upon the face.

The surface is not dry and scaly, as it was reported to be in the former paper. There is no growth of hair upon the affected areas. The other organs of the body are normal in appearance and function.

In my opinion, this is clearly a case of *Acanthosis Nigricans*. In ichthyosis, the skin is rough, dry and thickened. It cracks and forms numerous polygonal plates, and tends to peel at the margins. Pigmentation is not usually so marked as in this case. The natural skin lines are not followed uniformly. There is not the smooth, papillary hypertrophy, and oily, velvety feeling that is to be found in this case. The skin becomes dry and parchmentlike, and the disease occurs upon the extensor surfaces. On the other hand, *acanthosis nigricans* is characterized by pigmentation and thickening of the affected areas, in which the natural lines are preserved.

It is accompanied by numerous papillomatous growths; it is distributed over the neck, groins, axillæ and flexures generally, back of the hands, upon the face and orifices of the body (where the mucous membrane is usually affected), as well as upon the trunk. The axillæ are most markedly involved. In these cases where the skin shows many thickened tranverse folds, the palms of the hands, soles of the feet, and the nails are usually affected. Two-thirds of the cases occur in persons beyond middle life. Quite a large proportion of the cases are associated with cancer. This is a rare disease—only about thirty cases having been reported up to 1905.

The above clinical picture is modified in many cases.

Crocker of London reports a case in a young and vigorous man of twenty-two, in which the pigmentation and soft papillomatous growths were highly developed, but the hands and mucous membranes were free.

In the first case reported by him, the disease developed at the age of fourteen. In all cases occurring among young people, the general health has been good, and cancer has not been a factor.

I take exception to the conclusions in the former report of this case in the July, 1907, number of this journal as follows:

*First.* The plate-like scaling is not present, and he gets along very well with the usual number of baths taken by any cleanly individual.

*Second.* While the mucous membranes are not involved in this case, neither were they in the case reported by Crocker and some others.

*Third.* Carcinomatous growths, so far as I have been able to gather from case reports, do not occur in the younger individuals.

*Fourth.* As to increased pigmentation along the line of the veins in the affected area, in this case, the skin is hypertrophied to such an extent that the veins are not visible.

*Fifth.* In the authorities that I have been able to consult, I do not find that blood changes are present. Possibly there are some reports that are not at my disposal, which may render this point of more import.

*Sixth.* As to the improvement during the summer months, we have perpetual summer in Southern California; the young man has shown some slight improvement in the past six months, and has had no eczematous complications. This improvement may be due to the fact that he has been taking thyroid extract for about four months.

*Seventh.* The general health of *young* patients suffering from acanthosis nigricans is usually good.

*Eighth.* As to the palmer and plantar keratosis not being present, this was also true in Crocker's case reported above.

*Ninth.* As to involvement of hair and nails, this may or may not occur in both diseases.

*Tenth.* As to the contention that the long duration of this case should have caused more characteristic symptoms of acanthosis, I can reply with more than equal emphasis that the long duration of this case should have caused *some* characteristic symptoms of ichthyosis.

The case is a very unusual one. I feel that his attending physician had good grounds for the diagnosis suggested in the first report, *but*, in view of our further observation of the case, and with another year's history before us, I feel that acanthosis nigricans is undoubtedly the proper diagnosis at this time.



PLATE XXVI.—To illustrate Dr. W. W. Roblee's Article.





## ACNE AGMINATA.

(A CASE OF)

By WILLIAM B. TRIMBLE.

Instructor in Diseases of the Skin, New York University (University and Bellevue), Chief of the College Clinic and Assistant at the New York Skin and Cancer Hospital.

THE rarity of this affection is adequate reason for its report, and it is thought the record may be of interest to the profession.

During the spring of 1907 the patient presented herself for examination and treatment at the New York Skin and Cancer Hospital in the out-patient service of Professor Fox, with whose permission I report the case. She was assigned to my care, and the following notes were taken:

M. Y., Woman; age forty-two; married; nativity, Russian; strong, healthy looking; dark type; nervous temperament; weight about 160 pounds.

*Family History*—Father and mother dead; both lived to good old age, beyond 70. Patient has had two brothers and one sister, all of whom are dead. One brother was killed in a railroad accident; the cause of the other's death is unknown. The sister died of tuberculosis. There is no history of any skin disease in the family.

*Personal History*—She has no children and has had no miscarriages. If her memory is correct, she was afflicted with most of the diseases of childhood, including measles and scarlet fever. Since that time she has enjoyed good health, until the winter of 1906, when she was seized with a severe attack of la grippe; this was followed by rheumatism, which confined her to bed for a period of six weeks or more. The skin disease made its appearance during the latter part of this illness.

*Present Conditions*—The disease is confined to the face, mainly on the cheeks and eyelids, both upper and lower, and the upper lip. These locations are covered with a papular efflorescence, the individual lesions of which are discrete, varying in size from a pin head to a millet seed.

The incipient papule can be felt sometimes before it is visible. The color varies with the stage of development of the lesion; during evolution they are dusky red with a mild inflammatory areola, the centre then becomes yellow, and finally suppuration ensues; while the papule is in the stage of retrogression, it takes on a yellowish brown hue and a pigmented scar is left, the pigmentation lasting for some time.

Some of the earlier lesions have a distinct waxy appearance, and although seemingly solid, pus was extruded, when they were punctured.

The disease is well developed for so short a duration, which is only three months at this writing. The patient refused to have a biopsy made, but the clinical diagnosis is quite clear; she may submit to this later.

The urine examination was negative.

No attempt will be made to classify this disease; some authors describe it separately from folliclis, while others claim they are identical. It does not seem improbable that it belongs to that group of affections called tuberculides, using that term strictly in a generic sense.



PLATE XXVII.—To illustrate Dr. W. B. Trimble's Article.





## SOCIETY TRANSACTIONS.

### THE NEW YORK DERMATOLOGICAL SOCIETY.

356th Regular Meeting, March 24, 1908.

DR. E. B. BRONSON, President.

**Papulo-necrotic Tuberculide of Extensive Distribution.** Presented by Dr. J. A. FORDYCE.

The patient was of German birth, twenty-two years old, by profession a musician. His father died when thirty-eight of tuberculosis; his mother died in middle life; cause of death unknown. He denied any venereal infection.

In November, 1907, he first noticed an eruption on the extensor surfaces of the forearms, which was pustular in character, rather superficially situated and extended to the upper arms, the trunk and the face. These pustules in the course of three or four weeks healed with the production of very sharply defined superficial scars. The punched-out appearance of the scars was especially noticeable about the face.

About the time the eruption appeared on the forearms he had a sore throat and he entered one of the hospitals of this city, where he was treated for about two months with injections of insoluble mercurial salts. During the administration of mercury, new crops of lesions appeared. He left the hospital in question and entered the City Hospital, where he came under the observation of the writer. He then had numerous depressed scars over the face and body. They were especially numerous over the shoulders and upper half of the back, where they were pigmented and grouped very much after the manner of a luetic eruption. Many of the scars about the shoulders presented a slight keloidal thickening. There were a few scattered lesions over the anterior portions of the trunk and over the thighs and legs. His palms and soles were free. In addition he presented a group of suppurating lymph nodes at the angle of the jaw. These were subsequently opened and drained.

On account of the absence of history or any evidence of a primary syphilitic lesion about the genitals or the throat, the suspicion was excited that the eruption was a tuberculide and not a syphilide. This was strengthened by the suppuration of the lymph nodes and the positive reaction of the ophthalmic tuberculin test. He presented also a scar in the left inguinal region which he states resulted from a suppurating lymph node some years ago. At that time he had no genital lesion.

#### DISCUSSION.

Dr. Fox would not say that the man did not have syphilis, but he had never seen a papular syphilide leave so many small punched-out ulcerations except in connection with tuberculosis.

Dr. JACKSON said that it was an extraordinary syphilitic lesion in its being located so markedly on the back, and in the depth of its scars. He was inclined to agree with Dr. Fox that it was a syphilide modified by occurring in strumous subject.

Dr. MORROW said that he saw nothing in the appearance of the case inconsistent with the diagnosis of syphilis. The lesions on the shoulder which formed the most conspicuous feature were such as are occasionally seen in syphilis. The glandular complications, and the suppurative tendency were somewhat unusual, of course, but on the whole he was inclined to believe the case to be one of syphilis rather than tuberculide. The history of marked enlargement of the glands which has since disappeared, would support the diagnosis of syphilis.

Dr. KLOTZ stated that this patient had been under his observation in the German Hospital. When first seen early in December the larger part of the body was covered with lesions of different character. There were flat, isolated, red papules of decidedly syphilitic character and slightly infiltrated, scaly patches besides the pustules which principally covered the upper part of the back, the shoulder and the face and left the deep pitted scars. Under anti-syphilitic treatment (injections of the salicylate of mercury) the former lesions promptly disappeared, but the pustular ones continued to appear in new crops; they began as a small red papule bearing a minute pustule in the center under which later circumscribed necrosis was developed with cicatrization; the picture was that of what we used to call *acne varioliformis*. Under local treatment with the white precipitate of mercury the eruption of new lesions finally stopped. In January the patient became affected with an inflammation of the throat without any specific character, rather a subacute tonsillitis, accompanied by considerable fever and swelling of the glands of the neck, with no tendency to suppurate. A moderate fever continued even after the tonsillitis had subsided and a complication of syphilis with tuberculosis was suspected. The patient left the hospital in fair condition, ostensibly to resume his former position on a steamship.

Dr. WHITEHOUSE agreed with Dr. Fox that he had never seen a pustular syphilide produce such scars as this man showed, but from Dr. Klotz' study of the case it was evident that the man had syphilis—that, however, was not the whole thing in his opinion, as the tuberculin test for the eye has given a positive reaction for tuberculosis, although this could not be depended upon as absolute. He was inclined to believe it to be a mixed case, syphilis in a tubercular subject.

Dr. ELLIOT said that from the appearance of the scars left by the lesion and the character of the primary lesion, as seen on the face, he would unquestionably consider the case as one of so-called tuberculide. In view of the fact that Dr. Klotz had had the patient under treatment for syphilis and the lesions had nevertheless continued to recur, strengthened in his opinion the diagnosis.

Dr. FORDYCE said he was very glad to hear Dr. Klotz' statement that the throat trouble which the patient had when under observation in the German Hospital was not syphilis, as this seemed to throw some light on the primary infection. It seemed to him that the tuberculous focus was in the throat, leading to subsequent suppuration of the lymph nodes, and it was possible that the skin eruption could be referred to this infection. It was generally recognized that this form of necrotic tuberculide could not easily be differentiated from syphilis. While it was possible that the patient might have had syphilis, as Dr. Klotz stated, it seemed to him that the eruption might be explained on the other hypothesis. The patient undoubtedly had tuberculosis and whether he had



syphilis in addition was a question which subsequent observation would confirm or deny.

### Case for Diagnosis. Presented by Dr. Fox.

The patient was a Roumanian, who came to this country three months ago, and had lesions of a serpiginous character over the abdomen and inner aspect of the thighs.

#### DISCUSSION.

DRS. DADE, ROBINSON, FORDYCE, MEWBORN, ELLIOT, and JACKSON agreed that it was a parasitic condition, probably trichophytosis, but several of them expressed a desire to know the result of a microscopic examination, before a definite diagnosis could be made.

Dr. MORROW said that he had often seen a condition similar to that on the abdomen, in tropical climates, but that he had never seen the peculiar and characteristic lesions on the buttocks and back. It was his impression that it was a case of tropical tinea.

Dr. JOHNSTON said that he saw no evidence at present to support the eczema marginatum. What particularly impressed him was that the disease instead of developing between the scrotum and thighs (the site of predilection in eczema marginatum) commenced lower down on the inside of the thighs and extended upward. The elevated or verrucous border was also peculiar. Moreover, the disease was too deep seated apparently for a parasitic affection.

Dr. Fox said that the case had excited a great deal of interest among his assistants at the Skin and Cancer Hospital. The thickening of the skin and the intense pruritus, of which the patient complained, did not comport with an ordinary case of trichophytosis, but from the serpiginous character of the patches he was inclined to think the parasitic view a correct one. A section had been made, but the report had not yet been received. It had not occurred to him that it might be parasitic but the peculiar outline of the patches beneath the scrotum and upon the thighs, leaving the skin perfectly healthy about them, was so different from eczema marginatum that that diagnosis did not seem probable.

Dr. ELLIOT said that the infection did not necessarily have to take place in the crotch, it might occur anywheres. He considered the case to be one of tinea.

Dr. BRONSON said that an infection so general as this would affect the parts which were most susceptible, and no part is so susceptible as that between the scrotum and the thigh.

Dr. Fox said that it seemed strange that it should extend in a sort of band in a region where there was so much heat and irritation, without producing a diffuse inflammation.

### Case for Diagnosis (Child of about five years, with peculiar eruption on the backs of the legs). Presented by Dr. DADE.

The lesion first appeared eighteen months ago. There is no specific history. The mother has several other children all healthy. This child is in fine physical shape, and has had no drugs except castoria. The condition started on the legs and the child is constantly scratching the va-

rious spots. At present the appearance would warrant a diagnosis of bromide eruption so closely does it resemble the spongy, pus-soaked, hypertrophied lesions not infrequently seen in children given bromides. This can be ruled out though on close questioning of the mother.

#### DISCUSSION.

Dr. ROBINSON said that he had thought at first that it was an infection; in some places now it seems as if it might have been produced by some drug.

Dr. MEWBORN said that he was inclined to agree with Dr. ROBINSON that some drug had caused the eruption.

Dr. FORDYCE was still firmly convinced that the case was one of erythema induratum, with secondary pyogenic infection. He was not familiar with any other form of infection that would produce lesions of this character.

Dr. ELLIOT said that had not bromide been emphatically excluded he would have thought it a bromide eruption, and he certainly could see no indication of Bazin's disease in the case.

Dr. JACKSON thought it was not a case of Bazin's disease, but an infective process, a verrucous dermatitis, similar to that case he had exhibited, which was located on the leg of a man and had lasted for many months. He thought that the use of a stronger ointment of salicylic acid would still more improve the case, and he would see that it was used on one leg.

Dr. JOHNSTON said that he saw no evidence at present to support the diagnosis of Bazin's disease. There are, however, modifications of every clinical concept, and Bazin's disease may offer no exception to the rule. He thought it might better be described, on account of this verrucous surface, as a fungating dermatitis (dermatitis vegetans).

Upon being asked to define a fungating dermatitis, he said that it was simply an hyperplasia of all the skin structures of almost any origin, bacterial, medicamentous or metabolic inflammation. Several of the members of the American Dermatological Association had reported somewhat similar cases.

Dr. WHITEHOUSE said that the lesions did not appear to him to be those of erythema induratum. They were too superficial, they were not ulcerating, and not deep seated as in Bazin's disease. He adhered to his original diagnosis of infectious dermatitis. The results of the treatment to which it had been subjected would seem to bear out that diagnosis.

Dr. SHERWELL had not changed his opinion since seeing it last month, believed it to be an auto-infection of staphylococic nature in a child of depraved diathesis, calling it strumous or scrofulous as one will.

Dr. DADE said that in support of Dr. Fordyce's diagnosis, he would call attention to the fact that since last presented there had formed a large indurated plaque at the upper part of the right leg; this plaque was 2 by 1 inches in size, had softened and broken down, discharging its contents of thin bloody pus. Since the child was here last the legs have been kept in dressings constantly, and it has not been able to scratch at all. The lesions have been treated constantly with aluminium acetate or creolin. Had it been a case of simple infection it should have gotten well in a month. The condition has now lasted for two years. It is improved but by no means well.

#### Pityriasis Rosea. Presented by Dr. DADE.

The patient was a little girl about five years of age. The lower part of abdomen shows a diffuse eruption, but some scattered outlying lesions are sufficiently characteristic to make the diagnosis, one in particular showing well the chamois-colored crinkled center.

Dr. DADE said that when the child came to the clinic this afternoon the parents showed some dark colored salve which they had been using. He could not identify it. The body was covered with it, and the lower part of the abdomen from its use was almost weeping. He sent the child home to have a bath, and the condition presented now is very different.

**Case for Diagnosis. (Prev. shown.) By Dr. E. B. BRONSON.**

Dr. BRONSON said that he first presented this case some months ago with the tentative diagnosis of lupus erythematosus with telangiectatic character. The vascular element was very marked, and there was not much desquamation. When presented before, the lobes of the ears showed dark, purplish nodules the size of split peas, which had since been reduced by application of the unipolar high frequency spark. The same treatment had been used with some success on some of the patches on the face. Aside from this the treatment had consisted of occasional applications of strong (50 p. c.) resorcin-gelanthus and at night 15 per cent. tumenal-sulphuric-acid-gelanthus.

DISCUSSION.

Drs. JOHNSON, WHITEHOUSE, MORROW, SHERWELL, DADE, agreed with the diagnosis of lupus erythematosus.

Dr. FORDYCE agreed with the diagnosis of lupus erythematosus, but thought it was a very uncommon type. Lupus erythematosus is usually a progressive disease, but here it seemed to have entirely disappeared and left a pigmentation behind it. In studying the etiology of lupus erythematosus, he had lately employed the ophthalmo-tuberculin test in this affection, but he had obtained no reaction in any of them.

In response to inquiries Dr. BRONSON said that the condition had existed for four years. Microscopic examination showed the changes to be chiefly about the blood vessels, with new formations, besides thickening of connective tissue. There was found no evidence of tuberculosis in the tissue examined.

**Case for Diagnosis. Presented by Dr. Fox**

The patient was a stout well-nourished girl of about thirteen years of age. A year ago she was perfectly well. Last fall she had an eruption on the face, leaving a pigmentation and pigmented spots are now scattered over the body. Rubbing of the skin produces no elevation. The lesion on the face seems to be secondary.

DISCUSSION.

Dr. WHITEHOUSE thought that although the case had been going on for so long there was definite evidence of scabies and this would perfectly well account for the dermatographism and urticaria, both of which are not unusual in cases of scabies.

Dr. ELLIOT thought that there was some other condition present than scabies, and from the condition of the skin as a whole he was inclined to call it prurigo.

Dr. SHERWELL thought that in the discussion the, to him, main feature of the case had not been sufficiently dwelt on—he referred to the lividity of skin



on arms, *dorsa manus*, and other parts, he looked upon the trouble as having some characteristics of a neurotic erythema, a form of urticaria.

Dr. Fox said that the diagnosis of scabies was considered among others at the hospital. By daylight her body appears covered with atrophic and pigmented spots which are certainly not the result of scabies. At the first glance she appeared to have urticaria pigmentosa, but brisk rubbing failed to produce the elevation of urticarial lesions. She may have scabies, but that cannot account for the peculiar eruption over the body.

#### Case of Alopecia Syphilitica. Presented by Dr. Fox.

Dr. Fox said that he had shown this patient, not on account of its rarity, but because the question of syphilitic alopecia had been recently discussed. He claimed that in early syphilis we are very apt to see alopecia in the form of a general defluvium, or as plucked-out, partially bald spots, which occurred on the site of macules or papules of the scalp whether these had been noticed or not. In this case the eruption was mostly on one side, but there were two or three bald spots, having the plucked-out appearance so often seen on a man's occiput.

As for the alopecia of late syphilis, he claimed that although alopecia areata had been described as occurring in certain syphilitic subjects it is not necessarily a symptom of syphilis. Syphilis may be one of many causes, but the round partially bald spots which occur, without preceding ulceration, years after a syphilitic infection, should not be always regarded as late syphilitic alopecia.

#### A Case of Prurigo. Presented by Dr. J. A. FORDYCE.

The patient was a boy, eight years old, of Russian parentage, but born in this country. He gave a history of pruritic eruption during the past four years. The eruption was a typical one of rather marked prurigo involving the extremities and face. The child had been refused admission to the public schools on account of the belief of the examiner that the case was one of scabies. The lesions were very numerous on the backs of the hands and about the fingers and such a diagnosis, on account of the pruritic symptoms, could easily be made by one who was not an expert in these affections.

#### A Case of Miliary Papular Syphilide Resulting in Large Circinate Patches. Presented by Dr. J. A. FORDYCE.

The patient was twenty-five years old. In October, 1907, he had an initial lesion followed by lesions in the mouth and by a characteristic alopecia; then by a disseminated erythematous rash. The present eruption involved the face, trunk and extremities, and was especially marked over the upper half of the back and shoulders. It was present in large coin-sized circinate lesions which were dark brown in color, and made up of small miliary papules. The latter were especially noticeable when the skin over the lesions was made tense.



Case Suggesting Von Recklinghausen's Disease. Presented by Dr. DADE.

A case of Von Recklinghausen's disease, showing a very marked amount of pigmentation in large plaques and a great number of sub-cutaneous and cutaneous humors—one large one on right shoulder. Over the abdomen the tumours were most numerous and around the neck over the chest and shoulders the characterisic prickling was most marked, with very large plaques of pigmentation over left flank and right side of back low down.

For Diagnosis (Psoriasis or Syphilis?) Presented by Dr. MEWBORN.

A. C., aged fifty-nine years, was born in Brooklyn. Her father was a mulatto with teutonic blood for the white strain. Her mother was mulatto with mixed Indian and negro blood.

She had a child by a white man. Child died at two and a half years of age. Shortly after she married a negro. She had three or four miscarriages. About this time, twenty-five years ago, she had repeated operations for fistula in ano, leaving behind some stricture of the rectum. She lost the first husband and married again to a negro. No children.

Outside of the rectal trouble she has had no illnesses to speak of until last November she noticed that her hair became thinner and there was a considerable formation of scale in the scalp. About the same time an inflammation started at the matrices of several nails, some pus could be expressed, and a perionychia developed with deformity of the nails. Nails became thick, friable, yellow. Toe-nails also became affected. She had some chilly sensations and a rash came out on the body. Patches on the elbows, knees, arms, legs and back.

The lesions on arms are very much like psoriasis, only most of the scales have been removed. The scales present are somewhat mica-like, and are easily removed, showing the pellicle described by Brocq, and with further scratching the punctate hæmorrhages. On the legs some of the scales seem to have some pus formation. The nails look somewhat like psoriasis of nails, only the perionychia causes a suspicion of lues.

The lesions in the scalp are typical of psoriasis of the scalp.

DISCUSSION.

Dr. FORDYCE said that psoriasis would explain most of the lesions, though there might be a secondary pyogenic infection about the nails of the toes.

Dr. ROBINSON considered the case to be syphilis and not psoriasis, from the objective character of the lesions; and the condition of the nails confirms this diagnosis.

Dr. SHERWELL believed it to be a symbiotic affection with most pronounced syphilitic character.

Drs. MORROW, KLOTZ, JOHNSTON, JACKSON, ELLIOT, thought it a case of syphilis.

Dr. WHITEHOUSE said that it was a most interesting case. The patient had come to the Skin and Cancer Hospital the day before, but he had not time to get the history. Two clinical features, however, seemed to be most pronounced—the condition of the nails and the psoriatic character of the lesions themselves, and besides there was a great deal of itching. He was at first inclined to the diagnosis of psoriasis, but thought the question of syphilis should receive careful consideration. The nails, the itching, and the character of the patches themselves sustained the former view. The dry scales on some of the lesions were very well marked on both knees.

Dr. Fox said that at first glance he felt certain that the eruption was syphilis, but later was inclined to the diagnosis of psoriasis. He hoped that by further study Dr. Mewborn would be able to decide positively between the two, and that he would again present the case.

Granted that it was a case of psoriasis, the woman was no more a negro than a Caucasian. Indeed she is more of a Caucasian than a negro. While psoriasis may occur in mulattoes he has never personally known of its occurring in a black negro.

Dr. BRONSON said that one feature in regard to the nails struck him as important in indicating syphilis. He had never seen psoriasis cause disease of the matrix with a disturbance in the growth of the nail, and the free border of the nails intact, as in this case. The decided process in the matrix accompanied with infiltration does not comport with anything that he has seen in psoriasis.

Dr. MEWBORN replied that there were differences in the nails. In some, mostly in the terminal part of the nail where it was yellow, friable; but on one of the thumbs, it seemed to start in the matrix. The woman has patches on the scalp which are covered with the characteristic shiny, mica-like scale of psoriasis. He thought the great pigmentation was partly due to the natural color of the skin.

He did not exclude syphilis, as the woman has a history of multiple miscarriages, and a history of stricture of the rectum.

#### Case of Mycosis Fungoides. Presented by Dr. Fox.

The patient, an elderly woman, has had this disease for seven years, but it has been much worse this last year. It has disappeared in some places and appeared in others. She shows the characteristic semicircular and bull's-eye patches, *i. e.*, a papule with a raised circle around it.

The diagnosis was generally sustained.

#### Initial Lesion of the Anterior Nares. Presented by Dr. J. A. FORDYCE.

The patient, a man about twenty-five years old, presented an ulceration involving the anterior nares on the right side and leading to a considerable amount of infiltration and induration of the ala nasi. The ulceration was accompanied by enlargement of the group of lymph nodes at the angle of the jaw, more noticeable on the side opposite to the lesion. The patient also presented a beginning roseola. He did not have any genital lesion.

## NEW YORK ACADEMY OF MEDICINE.

## SECTION ON DERMATOLOGY.

Stated Meeting Held February 4, 1908.

Dr. A. R. ROBINSON in the Chair.

**Paget's Disease.** Presented by Dr. LAPOWSKI.

The patient is 46 years old, married. She has been pregnant seven times and had seven living children, of whom the fourth and seventh died at 6 and 9 years of age, respectively. The cause of death could not be established. The patient is not aware of any syphilitic disease. Four months ago a dollar-sized itching red patch appeared on the left breast, and two months later the patch ulcerated; in the meantime two other lesions appeared. She came to the Good Samaritan Dispensary several days ago in the same condition that she presents this evening. On the upper surface of the left breast, two inches to the right of the nipple, is a well-defined superficial ulceration the size of a quarter-dollar, with a reddish, slightly infiltrated border, giving a feeling of slight hardness when taken between the fingers. The surface is even, not raised above the level of the skin, only slightly bleeding, and covered with red, clean granulations. Three and a half inches to the left of the nipple are two separate pea-sized, deep ulcerations, funnel-shaped, but with sharply cut borders, deep and dry floor, having the aspect of gummata. The surrounding skin is only partially red, and only very slightly infiltrated. All the sores are painless. There are no enlarged glands in the axilla. The veins are very markedly developed on the affected breast above the ulcerations, reaching up to the clavicle.

DR. GOTTHEIL said that he believed one lesion to be Paget's disease and the other syphilis.

DR. HOWARD FOX said that he believed that both of the lesions were syphilitic.

DR. DANA HUBBARD believed one lesion to be Paget's disease and the other syphilis.

DR. TRIMBLE called attention to the fact that Paget's disease, when on the breast, is most apt to be upon the nipple itself, while in this case it had not that location. Although one of the lesions clinically somewhat resembled Paget's, the other, with its deep-seated ulceration, and punched-out appearance, was quite characteristic of lues, and his opinion was that the whole process was one of that disease.

DR. ROBINSON agreed that one lesion, on account of the non-elevated epithelial margin and firm, red base, may be Paget's, although it lacked the usual appearance of the base in Paget's disease, and also was not connected with the nipple; the other lesion was, he believed, syphilitic.

DR. POLLITZER called attention to the fact that Paget's disease in the beginning is a special form of eczema, while the lesions in this case are described simply as ulcers; why then call it Paget's disease?

DR. LAPOWSKI, closing the discussion, said that if the lesion which nearly all

agreed was Paget's disease came first, as it did, then a lesion of tertiary syphilis appearing later should appear at the same site, as being the place of least resistance.

**Acne Varioliformis.** Presented by Dr. HOWARD FOX.

The patient is 30 years old, single; Irish-American, locomotive engineer. He contracted syphilis thirteen years ago. Four years ago the present eruption began. The lesions have been constantly appearing since then and he has never been entirely free of them. They appear on the scalp and forehead near the hair line as "pimples," which in many cases break down and form crusts. Some of these lesions are followed by pitted scars. They require about six weeks to two months to complete their evolution. There is only moderate itching. White precipitate ointment has often benefited, but never cured him. A recent strict diet is accountable, according to the patient's opinion, for a decided improvement in the eruption.

**Active Bromide Eruption.** Presented by Dr. LAPOWSKI.

The patient is a child of four years who has been taking an "anti-epileptic mixture." She now shows a bromide acne on the face, and hypertrophied bromide patches on the left thigh.

**Healed Bromide Eruption.** Presented by Dr. LAPOWSKI.

The patient is a girl of sixteen, who has suffered for the past seven years from attacks of nervous coughing and who has been treated with bromides. She came to the Good Samaritan Dispensary with hypertrophied patches of bromide eruption on the sites of the present dark brownish spots on the two thighs. The bromides were stopped entirely and she was given twelve injections of atoxyl, each being 0.5 c. c. of a 15% preparation, and locally mild antiseptic lotions. The active lesions have now all disappeared.

DR. DEVLIN said that he had seen a typical bromide eruption in an adult, as a result of taking 10 ounces of a solution of stronium bromide containing about 20 grammes of the salt, in one week, although this salt is said never to produce an eruption.

DR. LAPOWSKI, closing the discussion, said that after using mild antiseptics externally and atoxyl internally, he had observed great improvement, both in the epilepsy and in the local condition.

**Naevus Pilosus Treated with Carbon Dioxide Snow.** Presented by Dr. DANA HUBBARD.

The patient, a little girl, shows the progress of the treatment. Where the freezings have been done the pigmentation and the heavy coarse hair have disappeared. The patient is about four-fifths cured; treatment is being continued, and the patient will be shown again later.



**For Diagnosis.** Presented by Dr. TRIMBLE.

The patient is a man of twenty-six, from the service of Dr. Fox at the New York Skin and Cancer Hospital. Both ears have been affected for the past eight years. As a rule, the lesions do not appear as deep-seated papules, as is the case with many tuberculides, but occur as small tumefactions, which after a varied length of time break down, discharging a rather thick pus. This is followed by scarring. The process has continued slowly until the whole helix and lobule are affected, and the disease is encroaching slightly on the face. There is no history of venereal or of tuberculous disease.

*Pathological Report.* The epidermis over the most intense part of the infiltration is thinned in places. The follicles are somewhat dilated and partially filled with parakeratotic horny material. Emigrated leucocytes are present in the epidermis. The main focus of infiltration is situated in the upper third of the corium, and consists of lymphocytes and plasma cells and proliferated fibroblasts. The distribution seems to be about the hair follicles. Isolated foci of infiltration in the deeper parts of the corium show a perivascular disposition. Some vessels are dilated and others have the lumen obliterated in the dense infiltration. The subepidermic portion of the corium is somewhat œdematous, and here and there is a very mild suggestion of degeneration of collagenous tissue.

Dr. LAPOWSKI said he believed lupus erythematosus could be excluded on account of the deep scars.

Dr. HOWARD FOX said that he believed this to be a case of lupus vulgaris and not lupus erythematosus on account of the history of sores, thick crusts and healing with scars.

Dr. GOTTHEIL said that he believed it to be a case of tuberculosis of the skin, not tuberculide.

Dr. DANA HUBBARD said that he believed it to be a case of tuberculosis of the skin, on account of the great destruction of the tissues.

Dr. TRIMBLE, closing the discussion, said that this case presented no apple jelly nodules and no giant cells or other pathological evidence of lupus vulgaris. He thought probably the case might be considered as one of the aberrant forms of lupus erythematosus, as the pathology pointed slightly that way; his own diagnosis, which was provisional, was lupus pernio.

**Psoriasis in a Negress.** Presented by Dr. DANA HUBBARD.

The patient is a girl six years of age. Her father, who comes with her, is of pure negro type. She appeared this afternoon at Professor Jackson's clinic. For the past four years patches of various size and shape have appeared on different parts of the body, each lasting about a month, and then disappearing. The disease is said to have been followed by an attack of black "measles." There is slight itching; no scratch marks are in evidence to-day. The eruption is general, involving scalp, ears, back of thighs, anterior surface of forearms, knees and trunk.

The scales are superficial and easily scraped off, showing bleeding points on the surface beneath. The patches appear to clear up in the center first. The patches on the forearms look like eczema, but in view of the history and appearance of the lesions elsewhere, psoriasis seems the more probable diagnosis, in spite of its rarity in the colored race.

DR. HOWARD FOX said that in his opinion the case was not one of psoriasis, as that disease is extremely rare in the pure blooded negro. On this patient, also, the eruption had not the ordinary distribution of psoriasis.

DR. GOTTHEIL said that he had never seen a case of psoriasis in a negro without well marked scaling, showing with especial distinctness on the dark skin. He regarded the case as one of chronic eczema with lichenification.

DR. DILLINGHAM said that he considered this case one of lichen planus. In a case of psoriasis which he had seen that day in a half-breed negro, there was not much scaling.

DR. LAPOWSKI said that he believed the case to be one of lichen planus, basing his diagnosis on the appearance of the skin lesions, and especially upon the white patches in the mouth. He did not believe that chronic eczema with lichenification would occur in such wide distribution and without very visible signs of scratching.

DR. POLLITZER said the lesions in the mouth were of an acute inflammatory nature, and not lichen planus.

DR. DANA HUBBARD, closing the discussion, said that not much stress could be laid on the location of the lesions in making a diagnosis of psoriasis, on account of the frequency with which the so-called sites of election are left unaffected. He had seen one other case of psoriasis in a negro. In this patient, the lesions come and go, without much itching. He was willing to accept the diagnosis of lichen planus, as being at least as probable as psoriasis.

### **Lupus Vulgaris on the Abdomen. Presented by Dr. LAPOWSKI.**

The patient is a woman thirty-five years of age, married for fifteen years. There is neither family nor personal history of tuberculosis. On the abdomen below the xiphoid process is a penny-sized round patch with ulcerated tubercles at the border. On the floor of the ulcer are seven pinhead-sized tubercles, undergoing necrosis; the intervening space of the floor is granular and red. The patch is slightly hard to the touch.

DR. POLLITZER agreed with the diagnosis, and advised extirpation by the knife with direct union or possibly skin grafting as the simplest, most expeditious, and most radical method.

DR. DANA HUBBARD said that in such a case he considered extirpation the best treatment; and if that were refused, then the X-ray, with freezing by liquid air or by carbon dioxide snow as third choice.

### **Pityriasis Rosea Occurring in a Syphilitic. Presented by Dr. HOWARD FOX.**

The same patient was shown here December 3, 1907, with dermatophia linearis. He is eighteen years old, single; a collector, born in the United States. Six months ago he was treated at the Skin and Cancer Hospital for a hard chancre, followed later by a perfectly typical

roseola and general adenopathy. As soon as the diagnosis was established he was put upon internal antisypilitic treatment, which he has continued to take faithfully up to the present time. About two weeks ago an eruption appeared upon the trunk and arms of pinkish macules, the majority oval in shape, and varying in size from a bean to a five-cent piece. One patch is as large as a quarter of a dollar. There is slight infiltration and scaling. None of the lesions show typical buckskin centers. Some of them show a fairly well-marked border. The patient shows a marked example of the "moth-eaten" form of syphilitic alopecia.

DR. GOTTHEIL said that although some few of the lesions present might be syphilitic, most of them were typically those of pityriasis rosea.

DR. LAPOWSKI called attention to the varying character of the different lesions, some showing scaling only, and some showing slight and others more infiltration. Those with a slightly raised border, a depressed center, and slight scaling, he thought were merely syphilis. The simple scaling might be caused by ointments. Treatment would make the diagnosis by causing the disappearance of the lesions in three weeks.

DR. WILLIAMS said that the disappearance of the lesions under antisypilitic treatment would prove nothing, because lesions of pityriasis rosea would probably disappear in three weeks, whether treated or not.

DR. POLLITZER believed the lesions were surely those of pityriasis rosea.

DR. ROBINSON believed all the lesions were syphilitic, possibly modified in appearance by infections by the organism of eczema seborrhoicum. Syphilis is such an imitator of other diseases that further observation of the case is necessary for a positive diagnosis.

### **Tubercular Leprosy.** Presented by DR. HOWARD FOX.

The patient is twenty-three years old, single; a ship steward, of English parentage. The family history negative. He was born in the Port of Spain, Trinidad, where he lived until he was twelve years old. He then moved to New Haven, Conn., remaining three years, and then moved to Brooklyn. A few months later spots upon his trunk appeared and his face began to swell. Several years later sores began to appear on his feet. Three or four years ago his voice began to be hoarse, and he noticed sores in his mouth. Sores on hands appeared within the past year, following a ten months' trial of a patent medicine. Examination shows typical facies of tubercular leprosy. Over the trunk and extremities are large and ill-defined red macules, which for the most part show no change in sensation. The ulnar nerves are enlarged. There are superficial ulcerations about some of the fingers and toes, and on the in-steps. The nails are all involved, broken off piecemeal, and show blackened crusted masses. The eyes are unaffected. There is atrophic rhinitis, catarrhal otitis media, and extensive superficial and deep ulceration of tongue, fauces, tonsils, pharynx, and larynx. The urine shows bacilli, stained with Ziehl's solution, which are similar in appearance to tubercle bacilli and which are all extra cellular.



**Tuberculide.** Presented by Dr. LAPOWSKI.

The patient is thirty years old, married three years ago. Five years ago he came to the Good Samaritan Dispensary, and the following notes were taken: Patient slight. On the posterior surface of the left thigh, below the buttock, there is a longitudinal lesion, with red, slightly bleeding granulating indolent floor, covered with thin yellowish pus. The lesion looked like an ecthyma. There was neither hardness nor any glands perceptible. On the whole trunk, from neck down to the middle of the thighs, there was visible a macular eruption, especially pronounced on the lumbar regions, the lower part of the abdomen and the sacral regions. The macules were round, pea-sized, with normal skin intervening, giving a net-like aspect to the surface, the openings of the net being the macules, the normal skin the connecting links. On the sides of the abdomen, just above the pelvis, on the anterior and posterior surfaces of the thighs, and on the buttocks were papules of various aspects; some millet-sized, with a flat reddish surface, slightly raised above the level, lying in the macule, the dark-brownish borders of the macule surrounding the papule; others, especially on the thigh, had dry, dark bloody crusts in the center, the removal of which left a necrotic wet center, with sharply defined edges, reaching deeper into the skin. In some parts dark, round, pea-sized pigmentations and minute to large pinhead-sized scars were seen. The eruption did not itch, and, according to the patient's statement, it was at this time of two months' duration. No glands were perceptible. The visible mucous membranes were free. I diagnosed "folliclis" and prescribed baths and antiseptic treatment for the ulcerations. But on subsequent visits I changed the diagnosis to syphilis, owing to the striking appearance of the macular eruption and to the presence of flat papules—considering the necrotic papules as local auto-infections. Rubbings were administered. The patient then disappeared from the Good Samaritan Dispensary. In October, 1907, about three months ago, he returned to the dispensary with a longitudinal ulceration in the right fossa cubitalis—and, to my surprise, with the same lesions on his body as I had seen five years ago. On questioning him as to his condition during the intervening five years, I found out that on seeing no improvement from rubbings he consulted another physician, who pronounced the disease syphilis and treated him with injections of salicylate of mercury for eighteen months. Seeing no improvement from the injections, he consulted another physician, who, after taking a careful history of the patient's previous unsuccessful treatment, ascribed the disease to some toxæmia and allowed the patient to marry, which he did—having now two healthy children—and treated him with aperients and regulated his diet. But the eruption remained.

On examining him on October 10, I found a longitudinal, soft scar on the thigh, the seat of previous ulceration, and an active new ulceration, looking exactly like the former ulceration on the thigh—in the



right fossa cubitalis. The ulceration started six days ago in the form of an abscess, which opened, leaving the present condition. The ulceration is  $2\frac{1}{2}$  m. m. in the transverse direction and  $1\frac{1}{2}$  m. m. in the longitudinal. The borders are raised, slightly infiltrated, and sharply cut. The floor is reddish, granulating, and covered with whitish pus. Slight hardness is felt when pressing in transverse direction. Glands are felt neither in the right axilla, nor in the fossa cubitalis; only in the left axilla is there one perceptible gland. The condition of the skin was the same as shown by the record of five years ago, only more scars could be seen on the lower extremities and some on the trunk. Some of the macules exhibited slight scaling, but on the whole the eruptions looked like the previous one of five years ago. There is a slight dermographism. I present this case as a tuberculide. It has some resemblance to the case I presented a year ago in this section—in which lesions were more advanced.

DR. POLLITZER said that he believed this case presented two distinct unrelated processes. The macules we are told had persisted unchanged for six years; if they were ever to develop into necrotic papules, they should do so in less time than that. The only change which would produce a macular eruption of this appearance remaining for six years must be a change in the blood vessels. He believed this part of the eruption to be a very slight degree of telangiectasis, congenital, and only accidentally discovered six years ago. This universal macular dermatosis was in no way related to the sparse ulcerated or crusted, probably follicular, lesions. The case in his opinion was one of *naevus telangiectodes disseminatus universalis*.

#### Tuberculosis of Testicle and Tuberculide of the Body. Presented by Dr. LAPOWSKI.

The patient is about fifty-six years old. He gives no history of syphilis. Four years ago the patient's right testicle was removed for tuberculosis in Mt. Sinai Hospital by Dr. Goldenberg. For the following two years he felt well. About two years ago he injured the left testicle, and several months later he was taken ill with "pneumonia" and remained in bed for several months, having several hemorrhages. During his illness the present ulceration of the testicle developed, and has remained since. He came to the Good Samaritan Dispensary complaining of itching of the body. He was weak, lean, emaciated, and coughs with occasional hemorrhages. On examination a fungate testicle was found and an eruption of various forms scattered over the body. Some are the usual follicular abscesses due to autoinfection, some—especially on abdomen and thighs—are papulo-tubercular in character, with deep necrotic centers and slightly infiltrated borders, leaving scars on healing. Especially on the lower two-thirds of the legs the dark-brownish scars of various dimensions from a pea to quarter-dollar size are very suggestive of a former necrotic process.

The patient complains of severe itching, but there are no marked lesions of pruritus on the body. Tubercle bacteria were found in the sputum. Some of the papulo-tubercles have a striking resemblance to the necrotic papules of the former patient.

DR. WILLIAMS said that without question there was tuberculosis in the lung and in the scrotum, but that the eruption on the skin had no tuberculous character, except its chronicity. There were no hard, deep papules, but on the contrary superficial pustules such as might occur in any mild pus infection.

DR. POLLITZER agreed with Dr. Williams. A tuberculide should begin deep in the cutis, and then affect the surface; and independently of scratching, it should lead to necrosis and scar formation, whereas the lesions in this case appeared to be infected scratch marks.

DR. LAPOWSKI, closing the discussion, said that he had observed in this case the firm masses under the lesions, which are so characteristic of a tuberculide.

**Vitiligo.** Presented by Dr. TRIMBLE from Dr. Fox's service at the Skin and Cancer Hospital.

The patient is a man twenty-four years old, a tailor, and a native of Russia. The case is of interest on account of its resemblance to alopecia areata. The lesions on the neck and sides of the face resemble this latter disease very much, but on closer inspection it can be seen that the hair is present, and it can be easily felt. A number of patches of canities in the scalp would seem to indicate that the vitiligo has been present in these locations also.

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## THE PHILADELPHIA DERMATOLOGICAL SOCIETY.

The regular monthly meeting of the Philadelphia Dermatological Society was held Tuesday evening, March 17, 1908, at the Medico-Chirurgical Hospital, Dr. M. B. HARTZELL, presiding.

**Bromide Eruption in an Infant, An Extensive Case of.** Presented by Dr. DAVIS.

The patient was an eight-months-old baby. The eruption first made its appearance after the baby had taken one bottle of a bromide mixture. There were about a dozen patches in all, from split-pea to silver-dollar in size. The lesions were elevated, wart-like, whitish-yellow or brownish in color, sharply marginate, and covered with yellowish-black crusts. A somewhat purulent fluid oozed from some of the lesions, while a whitish-yellow, thick cheesy fluid exuded from others. Several of these individual lesions had coalesced, forming the confluent areas. The lesions were apparent vesicopustules and multilocular. The eruption was noted upon the cheeks, the chin, the trunk, the buttocks, and the lower legs.

The interesting fact was recorded that the lesions continued to appear for twenty-four days after the drug had been stopped.

**Tubercular Syphilodermata Resembling Tinea Sycosis.** Presented by  
Dr. HARTZELL.

The patient was a male of thirty years, and had noticed the start of this outbreak nine months previously. A small papule first appeared upon the right side of the chin below the lip. This became larger, until at present the patch is silver-dollar in size; it is sharply marginate, raised, papillomatous, reddish, with a serpigenous border, and covered with a somewhat purulent secretion. There is also a quarter-dollar-sized, sharply marginate, raised, somewhat boggy, infiltrated, circinate patch on the right side of the neck below the ear, from which oozes a sticky, purulent fluid. Scars were also present on the chin. Several examinations were made for fungus, but all proved negative. The condition has improved slightly under two weeks' treatment with potassium iodide.

**Tinea Favosa Resembling Lupus Erythematosus.** By DR. DAVIS.

This condition first developed, eight years previously, when the patient was five years old. The girl was born in Hungary. At the present time there are four distinct patches upon the scalp, two silver-dollar in size, and the others dime-sized. The patches are all inflammatory, covered with a fine scale. There is some scarring, but it is chiefly the atrophy of the hair follicles. A great deal of the hair has fallen out, but numerous follicles are still open in the patches and some hair still remains. Because of the erythematous condition, the fact that numerous follicles were unattacked, and the dipping of the scale into the mouths of other follicles, lead to the resemblance to lupus erythematosus. The fungus was demonstrated. No other members of the family had been attacked. It was brought out in the discussion that only rarely was more than one member of a family attacked by this disease.

**Lichen Planus Associated with a Probable Palmar Syphilide.** Exhibited  
by Dr. WALLIS.

A very interesting condition in a male of fifty-seven years was presented. Apparently the man had two entirely separate and distinct eruptions. Upon the palm of the right hand was a squamous eruption of five years' duration. It was arranged in the form of three incomplete rings, about one-half-dollar in size, the outline was somewhat irregular, the lesions were slightly raised, and had a "plucked-out" appearance, the epidermis being raised and somewhat undermined. He stated that the palmar condition appeared one year after an initial lesion, and that it tended to improve in the summer. The other eruption first appeared six months ago with a few papules upon the wrists. At the present time,

the lesions are found on the flexure surface of the wrists, the back of the hands, the forearms, the elbows, a few scattered papules on the trunk, and on the thighs. The lesions consist of irregularly shaped, reddish-blue, flat, some umbilicated, slightly scaly papules. On the elbows coalescence has occurred, forming palm-sized, scaly, violaceous, slightly raised patches. There is an intense itching and slight burning present. The mucous membranes are uninvolved.

**Tubercular Syphilide Resembling Tuberculosis Cutis Verrucosa, A Probable Case of.** Presented by Dr. HARTZELL.

The patient was a woman thirty years of age, and had first noted the outbreak seven months ago. Three distinct patches are seen; a thumb-nail-sized lesion is located on the right side of the upper lip, extending on to the mucous membrane; another large somewhat linear patch occupies the entire lower lip, and also part of the chin; a third, three-cent-piece in size, is found on the extreme left hand side of the lower lip. All of the patches are distinctly papillomatous, yellowish-red in color, crusted, and have a slight muco-purulent discharge. The general appearance of the lesions suggested syphilis, blastomycosis, or a tuberculosis. A biopsy was made which showed tissue resembling a tuberculosis, but no tubercle bacilli or blastomyces were found. The lesions are improving markedly under potassium iodide, although the drug has only been administered for a week.

**Relapsing Erythema Nodosum.** Exhibited by Dr. KATZENSTEIN.

The patient was a girl of seventeen years, and of American parentage. The eruption first started three weeks ago, with the outbreak on the lower legs, of typical erythematous nodes. These nodes were tender, but unusually flat, being scarcely raised above the skin surface, and only slightly infiltrated, with no fluctuation. These lesions involuted in a few days, with the usual color changes. There have been three distinct outbreaks of these nodes, almost macules. At the present time the lower legs show the color changes of a dermatitis contusiformis.

**Adenoma Sebaceum, A Probable Case of.** Presented by Dr. DAVIS.

The patient was a woman twenty-six years of age, intelligent, and in comfortable circumstances. She had first noticed the spread and growth of these lesions six years ago. At the present there are a hundred or more, closely crowded, confluent and discrete, pin-point to wheat-grain-sized, elevated tumors. These lesions are upon the nose, the adjacent cheeks, and at the inner canthi of the eyes. The tumors are non-inflammatory, yellowish-white, and show glandular orifices. Some milium bodies are also present. The grouping of the lesions resembles somewhat benign cystic epitheliomata. The patient stated that her brother had a few lesions of the same character.



**Scleroderma with Purpuric Involvement of the Affected Areas, A Case of.** Presented by Dr. STOUT.

The patient was a male of fifty-two years. The exact duration of the condition was unknown, although the complicating purpuric outbreak had first started two weeks previously. Both feet, and the entire circumference of the lower legs, extending almost to the knees, were board-like in resistance. The sensation to touch was somewhat impaired, although the patient complained of burning and itching. The feet were of a dusky, dark-bluish hue, but the legs from the ankles to the knees were from a bluish-red to a bright-red in color. Some of the follicles around and below the knee showed pitting.

**Lichen Planus, An Extensive Case of.** Exhibited by Dr. STOUT.

The patient with the eruption was a well-built, healthy male, of twenty-six years. The disease had first appeared six months ago, with a few scattered papules upon the trunk. The lesions are now found on the penis, scrotum, the inner surface of the thighs, the upper legs, and a few scattered papules on the buttocks. There is one continuous patch extending from almost the waistline to the knees, chiefly on the anterior and inner surfaces of the thighs, and the upper legs. The only other lesions consist of a few grouped or single papules on the areas cited. The large plaque consists of numerous confluent, slightly raised, bright-red to violaceous, irregularly shaped, flat, slightly scaly papules. Most of the lesions were almost scarlet in color, and the diagnosis was not clear until a few typical outlying papules were found. The distribution, color, and the very large patch were commented upon. The wrists, the ankles, the entire upper portion of the body, and the mucous membranes of the mouth were free. There was intense pruritus.

**Leukoplakia Undergoing Epitheliomatous Change.** Presented by Dr. WALLIS.

The patient, a male of forty-three years, was an inveterate pipe-smoker. Fifteen years ago a small white patch appeared on the inner surface of the left cheek, just back of the corner of the mouth. This patch slowly increased in size, becoming hard and rough to the touch three years ago. A quarter-dollar-sized, white, papillomatous patch can now be seen on the inner surface of the left cheek, touching the corner of the mouth. Just posterior and joining this lesion is a split-pea sized, ulcerated patch, with a "pearly" border. Upon the inner surface of the right cheek another leukoplakic patch has recently developed. The patient stated that until recently he had always held his pipe on the left side of the mouth. Excision was advised as the proper treatment in the case.

**Pigmentation Following the Administration of Arsenic, A Marked Case of.** Presented by Dr. SCHAMBERG.

The patient was apparently in good physical condition, although seventy-one years of age. The patient had suffered for some time with a marked pruritus, with no cutaneous lesions. To help this condition, a physician had prescribed large doses of Fowler's solution. About four grains of arsenious acid were taken from the 13th of January to the 13th of February. The entire back from the shoulders to the lumbar region consists of one large, irregularly bordered, yellowish-black, smooth patch. Smaller patches of pigment, of the same character are noted on the chest, the abdomen, and the extremities. The man has a very grotesque appearance, as the patches anteriorly on the body are in a festooned and gyrate arrangement. The man also has numerous large senile warts on the back, between the shoulders, which originated, however, before the arsenic was taken. An excellent Lumiere photograph of the case was exhibited.

Dr. DAVIS showed a specimen of calamin lotion, in which the combination of boric acid with resorcin threw down a red precipitate resembling carmine. Thus forming an accidental and unsightly staining of light-colored hair.

**Epithelioma Resembling Syphilis, A Probable Case of.** Presented by Dr. PFAEHLER.

The patient was a woman of forty-three years, and had first noticed the lesion eighteen months previously. The woman had originally noted a small, pea-sized swelling, about one inch above the nipple of the right breast, and situated only a little below the skin surface. This increased in size and grew toward the cutaneous surface, forming at last a broken-down, crusted surface with a purulent discharge. The entire mass was exuded, leaving, as at present, a quarter-dollar-sized ulcer, with sharp, punched-out edges, and an uneven base. There is a somewhat inflammatory areolar to the lesion, but only slight induration of the breast. There is dullness in percussion of the mediastinum, and a Roentgen photograph shows a mass in the same area. Because of the general characteristics of the lesion, antisyphilitic treatment was suggested.

**Keratotic Eczema of a Possible Neurotic Origin, A Case of.** Presented by Dr. SCHAMBERG.

The patient was a woman of thirty years, and of a neurotic temperament. The condition had lasted for six years, improving somewhat in the summer. There were about a dozen lesions in all, located on the index finger and the thumb of the left hand, on the dorsal surface. The lesions were linear in arrangement and seemed to follow the distribution of the digital branch of the radial nerve. The eruption consisted of

raised, rough, flat, wart-like lesions, from split-pea to pinhead in size. There was some fissuring and thickening of the skin, but practically no active inflammation present. The woman complained of sharp, burning pains in the area involved.

**Lupus Erythematosus Limited to the Scalp.** Presented by Dr. KNOWLES.

The patient was a woman thirty-two years of age. She had first noticed the start of the eruption twelve years ago. There were four distinct patches in all, from dime to silver dollar in size. The largest area was on the left side of the scalp, above and just in front of the ear, at the hairy-margin. One patch was at the vertex of the scalp, one on the posterior portion, and the last on the right side over the parietal region. The patches were typical in every way, showing the slight scaling, on the inflammatory base, with the patulous follicles, and the scales adherent to these openings. The case was exhibited because the eruption was confined to the scalp, no other portion of the body having been involved at any time. The patient was presented through the courtesy of Dr. STELWAGON.

Dr. WALLIS, in closing, showed an excellent photograph of a marked case of steatoma of the scrotum.

FRANK CROZER KNOWLES, M. D.,  
Reporter.

**MANHATTAN DERMATOLOGICAL SOCIETY.**

63d Regular Meeting, November 1, 1907.

Dr. EDWARD PISKO, Presiding.

**Scleroderma of Lower Extremities.** By Dr. B. F. OCHS.

Mrs. A. L., fifty-two years old. Two years ago present condition began with burning and smarting of both legs; persistent, and present up to date. Status præsens: Around both ankles and on inner aspects of both thighs is a sharply defined, fine, scaly, itchy, reddened area. Entire skin of the lower extremities is somewhat thickened and glistening. A condition of varicosity of the superficial veins of the lower extremities and vulva is present. This condition extends up to the lower part of the abdomen, the line of demarcation being ill-defined.

**Scleroderma of Upper Extremities.** By Dr. L. WEISS.

Mrs. M. D., forty-five years old. Twenty-five years ago sustained trauma of left elbow; swelling lasted for one year. No symptoms till one year ago; skin of left arm and forearm became swollen in patches; largest patch on forearm about 12 inches long and 4 inches wide, elliptical in outline; skin is thickened, leathery, not œdematous, red, hot, and the lesion is sharply defined. Similar lesions on arm in small patches and striæ.

Dr. OULMANN believed that some of the patches were beginning to show atrophy.

**Atrophia Cutis Idiopathica.** By Dr. R. ABRAHAMS.

Mrs. R. S., fifty years old, Russian. Two years ago left leg began to itch; one year later noticed redness of same leg. At same time right leg became red and itchy. One year ago applied to Gouverneur Hospital for relief of the severe itching. General condition was excellent. Skin of both lower extremities was thin, translucent, and wrinkled; veins were prominent and appeared superficial. The affected area was red in color, and had a distinct hyperæmic border. This was observed as each new portion of the skin became atrophic. On each leg, extending anteriorly along the middle third of the tibia, is a patch of sclerotic skin. The atrophic process progressed very rapidly. Within one year both lower extremities, up to the hips, are involved. The interesting feature in this case is that the scleroderma and atrophy appeared at the same time, the former remaining limited to the front of the legs and the latter spreading to its present extent. Patient derives benefit in the exhibition of Thyroid extract, 5 gr. t. i. d., and menthol and carbolic locally.

Dr. GOTTHEIL: Entire lesion is a scleroderma now terminating in atrophy. Dr. ABRAHAMS, in observing the case for one year, always noticed an area of hyperæmia which later terminated in atrophy. Had not seen any scleroderma preceding the atrophy.

**Syphilis, Hereditaria Tardia: Rupial and Tubercular General Exanthem.**

By Dr. W. S. GOTTHEIL.

Willie C., two years old; full-term child, born well. At six months, snuffles, treated as ordinary catarrh; at one year, "spots" over eyebrows, disappearing spontaneously in time; pertussis, from sixth to eighteenth month; measles four months ago; upon recovery, immediately followed by present eruption, which appeared all over the body at once. General condition remained good; head and abdomen always were large. Two other children had measles at same time.

*Examination.* General eruption, most abundant on back, buttocks, legs, and extensor surfaces of arms. Over a hundred lesions, of the following type, scattered over these surfaces: Small, pinhead to pea-sized, fairly firm, sharply circumscribed, reddish-brown papules, some with very small adherent scales. The very smallest lesions possibly retrogressing, are distinctly of the lichen planus type: flat-topped, more or less angular and shining; the largest ones are prominent rounded tubercles. Over the whole of the back, especially on its upper portion, they have involuted, and are represented by small, circular, sharply cut cicatrices. Three lesions on the palms and one or two on the ears and face. The ears and face are inflamed and evidently secondarily infected. On the backs of the arms the eruption distinctly rupial in type; removal



of the oyster shell-like heaped-up crusts leaves deep, bleeding, and ragged excoriations. Round the anus there are a few hypertrophic papules. The only other sign of heredosyphilis is the presence of enlarged and fairly characteristic inguinal and cervical glands; the epitrochlears are not palpable. The child is rachitic, with enlarged and elongated head and prominent frontal protuberances, etc.

Mother, aged twenty-three, has been five times pregnant: First child, born a year after marriage (17 years old now), is living and well; second child, same; the third is the patient; fourth pregnancy resulted in miscarriage at the fifth month; fifth pregnancy, miscarriage at third month. She has always been well, never had any skin trouble, rheumatism, sores, or discharges. She presents no lesions or remains of lesions, no adenopathy, etc.

Father is said to have had "spots" (reddish-blue in color) on his thighs some few months ago; these were dry and disappeared spontaneously. Otherwise perfectly healthy. He has not been examined.

Dr. Pisko held the lesions to be hæmorrhagic. Dr. POLLITZER in similar conditions had excised large papules and had found large lacunæ filled with blood. Believes the large papules to be angiectatic in character.

#### **Tubercular Syphilide of Nose and Palate. By Dr. PAROUNAGIAN.**

Mrs. M. C., twenty-five, American, chorus-girl; personal history negative; affection began one year ago and has never entirely disappeared. At present lesion consists of a circumscribed crusted patch, covering the upper lip and cartilaginous portion of the nose; crust is thick, yellowish, soft; in groove of upper lip is an atrophic scar, undoubtedly the result of some recent ulceration. The palate is covered with superficial ulcerations and mucous patches; other than a slight adenopathy, no other manifestation of syphilis.

Dr. POLLITZER: Most of the lesions present on the nose were of a purely secondary affair, in all probability infection with streptococcus.

#### **Lichen Planus Verrucosus. By Dr. L. WEISS.**

Male, sixty-four; Russian. There are three affected areas, whose characteristics at the present time are almost the same, the duration being different. In the popliteal space the lesion began as a small papule twelve years ago; the one at the sacral region, about four years ago; at present, covering the region of the sacrum and extending outward, so as to occupy about one-third of each buttock, is a violaceous patch with rugose surface (slightly modified by the heat and moisture), with individual lichen papules extending around its periphery. In the popliteal space the lesion is 4 by 6 inches in size. On the left shin are two patches. The larger, sharply defined, circular, about three inches in diameter, shows marked verrucosus changes, is grayish-violaceous, scaly

and indurated; the smaller, one inch in size, is similar; both lesions show a few lichen papules along their peripheries, and have been present one year. Over the lower end of right forearm is a small scaly patch having the same characteristics as those already described. Mucous membranes are clear.

The presenter calls attention to the fact that the verrucous changes in lichen planus appears with predilection on the lower extremities.

**Cicatricial Contracture of Unusual Extent Following Late Syphilitic Ulcerations of the Skin.** By Dr. W. S. GOTTHEIL.

Male, forty-three; admitted to City Hospital October 10, 1907, suffering from "ulceration" of both elbows. At thirty, acquired "chancre," followed by rash over body; other manifestations not noticed. In early summer of 1907 had "gumma of brain," with subsequent paralysis of left side. During this time (period of three months) had extensive ulcerations of arms, shoulders, and legs. Whilst thus confined to bed, he lay continuously on either side of the body with his arms flexed, so that there was constant pressure on the elbows. This, patient states, is the cause of the ulcerations for which he enters hospital. Gives no history of burn or other accident. Was under the care of a physician in one of the small towns on the Hudson.

*Status Præsens:* Undersized and poorly developed; remains of hemiplegia are evident, though patient gets around fairly well. Face and greater part of scalp covered with large and small irregular, superficial, white cicatrices, which look as if they dated further back than the summer just passed. These scars are very numerous, with areas of healthy skin (in which the pilous and glandular structures are preserved) between them. Both upper extremities, from beyond the shoulders, clear down to the knuckles, have the skin replaced by an unbroken mass of dense and ridged cicatricial tissue. The shoulder joints are movable; the elbows are held firmly flexed, almost to the extreme, so that the forearms and hands point immovably to each opposite shoulder. Dense and thick cicatricial bands at the elbows keep the arms in this position; bands of lesser extent and thickness keep the hands inflexible. The cicatricial tissue of the left side ends at the middle of that side of the back in a large, circinate, scalloped margin, which curves around several inches below the axilla to the front of the shoulder joint. On the right side the cicatricial tissue does not extend on to the back. On various parts of the back and thighs are large and small circinate smooth cicatrices. The only contractures are in the upper extremities; the only active lesions are on the elbows, the entire points of which are the seats of ulcerations covered with healthy granulations, and evidently closing up.

At the time of the presentation of the patient (November 1, 1907), these ulcerations are nearly cicatrized under ordinary antileptic treat-

ment. For his contractures the patient will be referred to the surgeons.

The presenter states that he has never seen such extreme cicatricial contractures as a consequence of serpiginous gummatous ulceration of the skin and subcutis. The whole deformity resembles that occasioned by a severe burn. There is no history of such in this case.

The patient states that up to the beginning of the summer he had no scars of any kind, and that all the lesions now present are the result of what took place during the last summer.

#### **Lichen Planus with Intense Itching.** By Dr. E. L. COCKS.

Mrs. M. A., forty-five, has the present eruption for the last five years. Is never free, and the itching is very intense. During first years of the disease arsenic was given till œdema and colic appeared; then protoiodide of mercury, one-sixth of a grain t. i. d.; then corrosive sublimate, one-thirty-second of a grain t. i. d.; no relief. Patient is exhibited for suggestions as to treatment.

Dr. POLLITZER suggested the administration of salicylate of mercury.

Dr. OCHS suggested that the individual lesions be touched with pure carbolic and followed by absolute alcohol.

Dr. PAROUNAGIAN had used the X-ray with fair success in similar cases.

#### **Xanthoma Tuberosum Multiplex.** By Dr. W. S. GOTTHEIL.

John S., twenty-eight; oysterman. Eruption first noticed two years ago. Began at same time on knees, elbows, hands, and buttocks. Individual lesions steadily growing larger, new ones appearing in their neighborhood. Cause no inconvenience; seeks treatment, as the tumors on back of hands interfere with him in his work.

*Examination.* All the lesions, varying in size from pin-point to small marble, are typical pale yellow, yellowish-pink, and orange colored, prominent, sharply circumscribed masses. Most of these masses are grouped in characteristic locations, but many of them are isolated or scattered over various parts of the body. Both knees are covered with closely aggregated and sometimes confluent smaller tumors; similar condition on the buttocks; elbows less extensively affected, though the individual masses are larger than those on knees or buttocks; on backs of both hands are the largest tumors. The skin on the sides of the chest shows a great number of very small but characteristic xanthomatous masses.

There is no sugar present in the urine.

#### **Psoriasis, on Knees Only; First Attack in Female 52 Years Old.** By

Dr. M. B. PAROUNAGIAN.

Since July, 1907, patches on the knees have made their appearance, have not changed, no other lesions appearing anywhere else on the body. Has never had any disease of the skin before these lesions

developed. The lesions are on the extensor surfaces of both knees, circular in outline; the one on the right about half-dollar size; on the left, composed of two lesions, about one-half the size of the one on the right. They are dry, slightly itchy at times, and covered with typical psoriatic scales.

**Tuberculide.** By Dr. W. S. GOTTHEIL.

Mrs. M. B., forty, married, has four healthy children; never aborted, never sick save for present condition of skin. Two months ago noticed spots on buttocks and upper part of the posterior aspects of the thighs. They have not changed their appearance since that time, nor have they caused her any inconvenience, itching, or pain. One month ago similar spots appeared on elbows and knees, and few isolated ones on the front of the legs and on the calves.

*Examination.* No abnormality save the dermal lesions; no scars. On knees, elbows, buttocks, calves, and front of the legs are numerous lesions. They are papular and small tubercular tumors, bluish-red in color and sharply circumscribed. Some are covered with central crusts, circular in shape, adherent, and hard and dry. Removal of these crusts leaves a sharply outlined depression, with a dull red, glairy non-exulcerated base. All the lesions are hard, not tender, and extend fairly deeply into the skin. The smaller, more recent ones, have no crusts, but are capped by what appears to be a drying-up vesicle; some show a distinct tendency to umbilication. There are also scattered among the active lesions numerous atrophic, slightly pigmented areas, the bases of which are still slightly hard. These the presenter takes to be cicatrices left by past lesions.

DRS. COCKS and ABRAHAMs were of the opinion that the lesions were those of an acne necrotica.

**Favus Capitis, Treated with the X-ray: Cured.** By Dr. C. A. KINCH.

Boy, ten years old; was given ten sessions of varying lengths. Now has white scar surrounded by much pigmentation. The scar tissue is due to the long-standing infection with favus, not to the treatment.

**Scrofuloderma.** By Dr. L. OULMANN.

Girl, 13 years old. Was well up to five years ago; at that time was vaccinated, which was followed by a general adenopathy, and has been feeling poorly ever since. Six months ago swellings appeared around the ears and in the sub-maxillary region and were very tender. Two weeks later these swellings broke down and discharged a large amount of pus. This discharge is still present.

*Status præsens:* Entire skin of sub-maxillary region is affected. There are a number of ulcers varying in size from one-half to four



inches. Walls are inflamed, irregular, bases are necrotic, the larger lesions having broken-down glands as portions of their bases. Over right clavicle is a swelling, with the skin over it reddened and œdematous.

The microscopical examination of a section of a gland shows the presence of tubercles, giant cells, and tubercle bacilli.

The presenter is of the opinion that the necrotic process present is not the result of the tubercular infection alone, but of a mixed infection with pus organisms.

#### Early Secondary Syphilis with Late Manifestations. By Dr. M. B. PAROUNAGIAN.

Male, Armenian, thirty-nine, single. Consulted physician in August on account of itching in region of anus. Upon examination hemorrhoids and a superficial ulceration of the right gluteal ridge was found. Further examination revealed a general adenopathy. Patient was put upon anti-leuitic treatment. Readily responded, but at end of one month, contrary to advice, stopped treatment. Three weeks later throat became sore, mucous patches appeared upon the lips and tongue, and a papular reddish eruption appeared on the chin, nose, and forehead; also an ulceration upon the palate. Under Ungt. Hydrar. Ammon. the lesions disappeared, except the one on the palate. The case is presented to show that while the lesions upon the skin were clearly of a secondary nature, the lesions in the mouth were distinctly tertiary.

#### Morphoea. By Dr. L. OULMANN.

Male, Russian, forty-three. In February of this year patient noticed a small purplish patch on left side of abdomen, in the axillary line. The patch is continuously growing larger. Its color gradually changed to cream. It is now about the size of the palm, hard, not attached to the deeper parts, and has an erythematous raised margin.

The presenter has used the X-rays on this lesion up to the present time with no apparent result.

M. B. PAROUNAGIAN, M. D.,  
Secretary.

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#### MANHATTAN DERMATOLOGICAL SOCIETY.

64th Regular Meeting, December 6, 1907.

Dr. A. BLEIMAN, Chairman.

#### Chancre of the Anus. By Dr. B. F. OCHS.

Boy, sixteen years old. Three months ago, while in a lodging house, a man attempted intercourse with him per rectum. About three weeks later he noticed a sore on his anus. At first the lesion was itchy, and in a few days there was marked ulceration. After waiting a few weeks he applied for treatment.

*Examination.* On the left side of the anus is an irregular mass three-quarters by three inches in size, elevated, grayish, border somewhat darker and firmer than the mass itself. On the right side of the anus are smaller, similar masses. There is also a general macular eruption, general adenopathy, and a specific angina. Under anti-syphilitic treatment the eruption has disappeared and the masses have grown considerably smaller.

**Granuloma, Due to Strepto- and Staphyococcus Infection.** By Dr. B. F. OCHS.

Female, sixty-three years old. Last June accidentally stuck the thumb of her right hand with a brass pin. For a week the finger was sore and painful, then noticed a small tumor growing from the place of entrance of the pin. Excised at dispensary, base cauterized, and a wet dressing applied. In a short time the growth reappeared, but as it caused her no pain, she did nothing for it.

On November 5, 1907, she applied to the Lebanon Dispensary for treatment. On the outer side of the end phalanx of the thumb of the right hand was a hemispherical, perfectly smooth, dark red, soft mass, about the size of a cherry, entirely without skin, on a non-inflammatory base. No tenderness, no itching. The mass was excised, base cauterized, and a wet compression dressing applied. In a week the mass had returned and was much larger and was somewhat painful. On account of the rapidity of the return of the mass, a diagnosis of angiosarcoma was made. The mass was excised, a large portion of non-affected skin was removed with it, and a firm dressing applied. No recurrence.

Microscopical examination showed the mass to be composed of granulation tissue, in the meshes of which were large numbers of staphylococci and streptococci. Diagnosis: Inflammatory granuloma.

**Radio-Dermatitis.** By W. S. GOTTHEIL.

Mrs. M. S., thirty-one years old. In June, 1907, had both forearms rayed twelve times for hypertrichosis by a radiotherapeutic expert. At first, daily; later, every other day. After the twelfth session an intense redness, later a purplish discoloration accompanied by a severe burning pain was noticed. Two weeks later vesiculation and ulceration followed. Patient was then referred to the presenter.

Present condition: Left Forearm—On dorsal aspect are two ulcerations, the larger about 5 by 1½ inches in size, the smaller about the size of a silver dollar; there is some granulation tissue present. The edges are red, somewhat raised, and firm.

Right Forearm—In the corresponding position is a smaller, though healthier, lesion. Both lesions emit a foul odor. Since their appearance they have been treated according to surgical principles with little effect.

The upper margin of the lesion on the left forearm shows some cicatricial tissue. The case is presented for suggestions as to treatment.

DR. GEYSER advised the use of blue light for the pains, and dry dressings for the ulcerations. DR. GOTTHEIL remarked that these cases interested him very much, as he had seen a number of them, sent to him by physicians who had applied the rays very carefully and for a short time, with disastrous results. He does not consider the ulcerations as burns proper, but as aseptic necrosis, which condition does not respond very readily to the treatment at our disposal.

**Case for Diagnosis.** By Dr. B. F. OCHS.

J. S., forty-three, sailor. Had been under observation of Health Board for supposed variola, and discharged as not being a true case. Then developed pneumonia; was sick for three weeks. After leaving hospital found that his entire skin was desquamating.

*Examination:* On the scalp some slightly depressed, whitish, well-defined areas, surrounded by a line of fine desquamation. On the body the scales are somewhat larger, desquamation irregular, some parts of the body being free. On the hands and feet the exfoliation is in large flakes. On the body are some few isolated light brownish to dark brownish non-elevated spots, varying in size from pinhead to lentil; the entire skin is thickened, especially the palms.

The patient's occupation at present is that of a stone-cutter.

DRS. GOTTHEIL and PAROUNAGIAN were inclined to erythema multiforme, on account of the apparent remains of vesicles now present. DRS. KINCH and ROBINSON favored some drug eruption complicated by some general erythematous lesion.

**Primary Sclerosis Coincident with Condylomata.** By Dr. B. F. OCHS.

Girl, eighteen, colored, presents around vulva a number of lesions. Directly in the center of the fourchette is a hard and sharply defined ulcer, with sloping edges and undermined base. Surrounding this are a number of condylomata, soft, and non-inflammatory, which also extend up around the vulva.

**Lichen Planus Limited to One Hand.** By B. F. OCHS.

E. W., twenty. Always well up to one year ago, when small "warts" appeared on back of right hand. Slowly these increased in number, so that at the present time the entire dorsum of the right hand is fairly studded with these lesions. They are small, shiny, granular, flat papules, many with depressed centers, violaceous in color. On the face, under left lower lip, is a sharply defined area of scaly eczema.

The case is presented on account of the isolated patch of lichen planus.

M. B. PAROUNAGIAN, M. D.,  
Secretary.

# REVIEW of DERMATOLOGY AND SYPHILIS

Under the charge of A. D. MEWBORN, M. D.

## INFLAMMATIONS.

By H. P. TOWLE, M. D., Boston.

**Erythema Nodosum, Arthritis and.** Symes. *Brit. Med. Jour.*, 1907, 2, p. 202.

The article begins with the statement that the generally accepted view with regard to the arthritis which sometimes accompanies erythema nodosum is that it is a true articular rheumatism. To this view Symes dissents. He also maintains that, according to his experience, the association of arthritis is less frequent than is commonly stated. He could not obtain the signs or the history of chorea, endocarditis or arthritis in more than ten per cent. of all his cases. His reasons for believing that the arthritis of erythema nodosum is not a true rheumatism are—that, unlike rheumatic fever, erythema nodosum is most common in females; is most prevalent in the last and first two quarters of the year; has a long prodromal period of malaise; comparative freedom from recurrence; slight constitutional disturbances during the period of fever; is characterized by phlyctenulæ in the eyes; the arthritis, the fever and the rash are but slightly influenced by the salicylates. He then quotes three cases to illustrate these points.

**Erythema Nodosum, Upon the Etiology of.** Hildebrandt. *Münch, Med. Wochenschr.*, 1907, LIX, 310.

Hildebrandt reports a case in support of the statement made by Uffelmann and Oehme that a relationship exists between tuberculosis and certain forms of erythema nodosum. The patient was a woman, aged 24, who had been tuberculous since childhood. The present affection is recent and came on ten or twelve days after an acute attack of angina and stomatitis. At the time the erythema nodosum was at its height, when new eruptions were appearing every day, a positive diazo-reaction was obtained. Two guinea pigs which received intraperitoneal injections of venous blood taken from the patient at this time developed tuberculosis. The search for other bacteria in the venous blood was negative. Later on the patient developed in succession a right-sided pleurisy, then a left-sided pleurisy and finally a pericarditis, together with an infiltration of the right apex, all of which were considered to be tubercular. It is also stated that at the very time the erythema nodosum was in its most active stage virulent tubercle bacilli were found in the blood. Hildebrandt's conclusions are that, while an erythema nodosum which occurs in a tubercular patient may not necessarily have any connection with the tubercular



process, yet it is very possible, if not actually proved, that the tubercle bacilli may provoke an eruption which can not be distinguished from the ordinary erythema nodosum.

**Psoriasis, Three Cases of, in Infants.** Friedrichs. *Derm. Zeitschr.*, 1907, XIV, 232.

Friedrichs reports three unusual cases of psoriasis in infants in which, however, he admits that the diagnosis is not beyond dispute. The point upon which he apparently lays the greatest stress in making his diagnosis is the presence of capillary bleeding upon irritation.

Case I—Three months old. The eruption began two weeks before in the axillæ and popliteal spaces. Thence it gradually spread over the body until it had become almost universal, only the hands, feet and a few small strips on the body being spared. The borders of the eruption toward these free places were polycyclic. The affected skin was red and covered with small and large laminated scales, especially abundant on the scalp. On the outer sides of the forearms were raised lesions whose centres were covered with heaped-up scales and which showed typical capillary bleeding on scratching.

Case II—Eight weeks old. The skin of the lower half of the body up to the navel was diffusely red and covered with fine scales. Removal of the scales induces capillary bleeding. Upon the upper half of the trunk and on the scalp were larger, disc-form and smaller, somewhat raised lesions, covered with silvery scales, which showed capillary bleeding upon scratching.

Case III—Three months old. The eruption had been present ever since the child was one and one-half months old. The parts involved were the scalp, neck, lower abdominal region, buttocks, scrotum and adjacent parts of the thighs. These areas were intensely red, somewhat infiltrated and partially covered with scales. The borders toward the sound skin were polycyclic and sharply defined. Scattered over the sound skin nearby were small lesions covered with whitish, shining, easily-detached scales. Capillary bleeding. Pruritus marked.

**Urticaria, Treatment of.** Finch. *N. Y. Med. Rec.*, Feb. 22, 1908, p. 301.

Finch prefers creosote in the treatment of urticaria, although he can not explain its action. Under its use he has seen cases which had resisted all ordinary treatment clear up after a few doses. He believes that an attack may be greatly modified or even averted in acute toxic cases if they are seen early, before the eruption is fully developed. Finch administers four minims of creosote in elastic capsules with two minims in an enteric pill as an initial dose, followed every fifteen or twenty minutes by two minims in capsules until effect. In the recurrent or chronic forms

of urticaria also creosote may lessen the frequency of the attacks or cause them to cease entirely. Two minims are given in capsules after each meal and before retiring, and four minims in an enteric pill. He reports one case of nine years' duration in which this treatment has been followed for five years. Whereas the attacks were formerly frequent, since taking this treatment the patient has often had weeks and months without one. In violent cases he advises the administration of five grains of Turpeth mineral mixed with a little water to induce emesis, giving a high enema at the same time. If the enema fails, he gives a single dose of atropine, four-one hundred and fiftieths grain subcutaneously. In cases with œdema of the mucous membranes the inhalation of amyl nitrite is advised together with the local application of adrenalin.

**Lichen Ruber Verrucosus of the Scalp, A Case of.** Arndt. *Derm. Zeitschr.*, 1907, XIV, 122.

Before the Berlin Dermatological Society Arndt demonstrated a case of this very unusual condition of which, according to Arndt, but seven or eight cases have been reported. In the present case an itching eruption had existed behind the left ear and in the adjacent hairy scalp for a year and a half. Although the situation was unusual, Arndt considered that the diagnosis of lichen ruber verrucosus was easy. The eruption consisted of a plaque immediately behind the ear which was made up of a number of split-pea sized, yellowish-white, "horn-cyst" lesions, while, further back, were comedo-like formations with black tops situated about the mouths of the follicles.

**Lichen Planus, A Case of Syphilis with.** Arndt. *Derm. Zeitschr.*, 1907, XIV, 123.

Six days after the completion of a series of injections given in treatment of a secondary syphilide, a non-itching eruption developed on the skin of the penis and scrotum, about the navel, lower abdomen and on the dorsum of the left hand. Close inspection proved the eruption to be a typical lichen planus. The lesions were typical grayish-white, miliary, hemispherical papules occurring both singly and in groups and also larger bluish-red discs, some of which were covered with very dry, adherent scales. Some were arranged in rows and in a net-work after the characteristic manner of lichen planus. This arrangement was of diagnostic importance to Arndt in differentiating the eruption from a manifestation of syphilis.

**Psoriasis, Treatment of, by Ultraviolet Rays.** Becker. *Deutsche Med. Wochenschr.*, 1907, XXXIII, 2139.

Becker reports good results from the treatment of psoriasis by the ultraviolet rays. He does not believe it necessary to press the lamp

directly down upon the patches if they are not infiltrated as he was able to obtain his results with lamp at a distance. This method allows larger areas to be exposed than if the lamp is close. Becker filtered the rays through a solution of methylene blue, fixed the lamp at from 5 to 15 cm. and gave sittings of from 5 to 15 minutes' duration every second day. The ideal reaction, he states, is a simple hyperæmia without vesiculation. For infiltrated plaques, he advises the conjoined use of the x-rays.

**Pityriasis Rubra Hebrae, Pemphigus Foliaceus and Dermatitis Herpetiformis of Duhring.** Bogolepoff. *Archives de Med. Experimentale et d'Anat. Path.*, 1907, XIX, 705.

Bogolepoff had the opportunity to perform autopsies on two patients with pityriasis rubra Hebræ, one with pemphigus foliaceus and one with dermatitis herpetiformis Duhring. He was much impressed by the fact that alterations in the thyroid glands and in the suprarenal capsules were present in all four cases. While he does not wish to assert that alterations in these glands is the sole cause of these diseases in all cases, yet he believes that many cases may perhaps be referred to them. He therefore publishes the cases in the hope that they may lead to further investigations by others.

At autopsy Bogolepoff found the following pathological changes:

Case I—Pityriasis rubra Hebræ. Atrophy of the thyroid body with colloid material in the follicles.

Case II—Pityriasis rubra Hebræ. Colloid degeneration of the thyroid body with increase of connective tissue. Metastatic nodule of lymphosarcoma in supra-renal capsule.

Case III—Pemphigus foliaceus. Adenoma of thyroid body. Adenoma of suprarenal capsule.

Case IV—Maladie de Duhring. Adeno-carcinoma of thyroid body. Degenerative vacuole formation and connective hyperphasia of suprarenal capsule.

The argument which lead him to believe that pathological changes in the thyroid and the supra-renal capsules may have an ætiological relationship to these affections may be summarized as follows: Experimental physiology has shown that extirpation of either the thyroid or the suprarenals gives rise to symptoms of poisoning, although the actual toxin is not known. As the symptoms following the extirpation of the thyroid resemble those arising from the extirpation of the suprarenals, the conclusion that the two glands possess analogous functions seems justified. The exact nature of these functions, however, still remains uncertain. In the case of the thyroid, the prevailing belief is that it is the production of iodothyrene which is supposed to neutralize the toxic effects of nitrogen products which accumulate in the blood. It is also known that pathological changes in the thyroid tend to produce



myxædema or Basedow's disease on the one hand or symptoms of intoxication on the other; while pathological changes in the suprarenals, such as tuberculosis, accompany Addison's disease on the one hand, although not invariably, and symptoms of poisoning, like those of curare, on the other. Various affections of the suprarenals have been found in connection with Addison's disease, such as tuberculosis, cancer, amyloid, cysts, gummata and abscesses. Oro has also demonstrated by autopsy the presence of atrophy of the suprarenal capsules in subjects with an erythrodermic exfoliante. In this disease, moreover, Brocq has called attention to the fact that in cases which recover the last symptom to disappear is the pigmentation and that the degree of this pigmentation varies directly with the degree of the preceding redness. In view of these facts, Bogolepoff believes that this pigmentation as well as the desquamative appearances are provoked by changes in the suprarenals.

Much confusion also exists in regard to the etiology of pemphigus and dermatitis herpetiformis, although the majority refer the cause to some change in the nervous system. Bogolepoff asks how, in this case, the changes which he found in the thyroid are to be explained. He believes that they are the cause of pemphigus foliaceus and of dermatitis herpetiformis. His reasoning is that the first result of the pathological alterations in the thyroid is an interference with the production of iodothyrene. Now iodothyrene, he says, increases the excitability of the pneumogastric and depressor nerves which regulate the force and frequency of the contractions of the heart and at the same time it diminishes the excitability of the vaso-motor and accelerator nerves. As a result of the interference with the production of iodothyrene iodine accumulates in the organism, changes occur in the cardiac and vaso-motor nerves and all the symptoms of iodine poisoning and vaso-motor disturbance follow. That bullous eruptions may follow iodine poisoning is attested by numerous writers. Therefore, Bogolepoff concludes, pemphigus foliaceus and dermatitis herpetiformis are forms of iodine poisoning induced by pathological changes in the thyroid.



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## THE OCCURRENCE OF A PROLIFERATING CESTODE LARVA (SPARGANUM PROLIFERUM) IN MAN IN FLORIDA.<sup>1</sup>

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*MEDICAL history of the case.*—In June of this year, I received from Dr. H. Gates, of Manatee, Florida, specimens of worms, for identification, which he had taken from the skin of man. The following extracts from Doctor Gates' letters give all that is known to me regarding the medical history of the case. In connection with this history, it will be well to abstract in considerable detail on account of a very similar case recently reported by Ijima (1905) in Tokyo, Japan.

*Gates' case.*—"Enclosed find specimens of worms from human flesh. They are inclosed in sacks deep under the skin in the connective tissue. My patient has thousands of them, all over the trunk; they can be seen and felt as nodules; deeper in the connective tissue in the left groin and left breast, there seem to be large masses of them. I send some I obtained by cutting open the nodules and squeezing them out, and others still in the cyst as I found them."—From letter dated June 17, 1907.

"In reply to your request for history, etc., of patient (J. W. M.), infected with larval tapeworm, I would state that I first discovered the condition in April of this year. I was called in to treat him for dysentery. While examining over abdomen, I found a great many nodules in the skin, and also in the fascia between the skin and the muscles. Deep down in the abdominal cavity, I found large and small tumors, some moveable, and others fixed by adhesions. All the lymphatic glands on the side most infected were enlarged and in masses, as if they had formed close union with surrounding tissue.

"The muscles were exempt from nodules, but soft and flabby.

<sup>1</sup> Read before the Sixth International Dermatological Congress, New York, September 9-11, 1907.

I opened one nodule near the surface and obtained two worms. Most of the nodules on the skin are about the size and shape of grains of rice. When they first appear there is an itching produced. The cyst is filled with a clear watery fluid in which is found the small worm. In a few days a cyst wall is formed, surrounding the worm which lies in a jelly- or slime-like substance. After weeks or months the cyst wall becomes firm, and surrounds one or more worms. In some cysts I have found as many as three worms. In the course of a few months the cyst wall breaks and there is nothing left, but, sometimes, a blue spot showing a small hemorrhage; after this is absorbed, there will be only a spot of indurated tissue to mark the place. The places that have been infected the longest appear as a mass of indurated skin and fascia closely connected, so that the skin can be picked up only with the mass of worms and tissue.

"Patient is now forty-eight years old. He came to Florida in 1872 from Minnesota and settled with his father on a point on the Manatee River, now known as Mann's Point, which was accessible to fish and oysters.

"When twenty-three years old, while hunting in the woods about  $1\frac{1}{2}$  miles from the coast, he noticed a small pimple on the left shoulder, which attracted his attention because of the itching. He thought the skin had been punctured by a thorn. He squeezed the lump, from which came a small flat worm about 1-16 inch wide and 5-8 inch long. One year after the first appearance on the shoulder, he noticed four or five small lumps on his chest; these he opened with a knife and he picked out the same kind of worms; these swellings also had produced an itching sensation. Patient was then living as fisherman on Sarasota Bay.

"While fishing, patient's diet consisted of smoked and dried fish, raw oysters, scallops, and clams. Up to five or six years ago he was a robust, healthy specimen of manhood, but lacked energy. At present he has a tired expression, has less energy, and becomes exhausted after little exertion.

"From the photographs, you will see enlargement of the left breast and shoulder, also of left groin and lumbar region. Spleen and liver are enlarged.

"The infection is slight on the right side.

"Patient has a wife and five children, all of whom are healthy.

"There probably was another case similar to this a few years ago, in this county. I have been trying to obtain a history of it, but have failed thus far. The man moved from here to California,

where he died. The report was that he was eaten up with worms before he died."—Extracts from letter, August, 1907.

*Japanese case.*—The patient was a Japanese woman, Yae Tanaka by name, resident in Tokyo or immediate vicinity. Before her marriage to a dealer in old furniture, she was a weaver, "occupations which place her decidedly in the lower class of society."

At the age of thirty-three years, in the spring of 1904, she visited the University Hospital at Tokyo, for treatment for left inguinal hernia, entering the surgical wards of Dr. J. Kondo. This hernia was traceable to the presence of parasites in the region of Ligamentum poupartii. In addition to the hernia, she presented a peculiarly swollen condition of the integument which bore scattered spots of acne-like appearance. This abnormal condition extended over nearly the entire body, except on the face and upper extremities; it was most prominent on the left thigh which was greatly swollen and presented very much the appearance of elephantiasis, although the skin and underlying tissues were quite soft, so that they hung down by their own weight and could be grasped in a flaccid mass by the hand.

When twenty-five years old, the patient had a tapeworm, the species of which is not known. The dermal affection was first felt when she was thirty-one years old, so that at time of entrance to hospital it was of about two years standing. It had given no particular trouble beyond that imposed upon motion by the swollen thigh, and the itching of the skin in parts where a pimple-like hardening made its appearance; scratching with the nails, in order to allay the itching, had led to breaking the skin, from which a soft whitish mass, together with some fluid, could be pressed out. A number of resulting recent scars, especially on the breasts, were visible.

In preparations, made of skin taken from the left thigh, Ijima became convinced of the presence, in the connective tissue, of numerous encapsuled worms, the cestode nature of which was recognized from the calcareous corpuscles.

On each of two subsequent occasions, July 9th and 24th, 1904, a very large piece of skin, with the underlying connective tissue, was excised from the left thigh, in order to relieve the patient of the superfluous tissue. Altogether, several pounds in weight were removed during patient's stay at the hospital.

When freshly excised, the subcutaneous tissues presented an unusual appearance. At places several centimeters thick, they were



moderately rich in panniculus adiposus and extraordinarily rich in lymph: the latter swelled the connective tissue between the panniculi, giving it a slimy or gelatinous appearance and consistency; the slimy character seemed more manifest in the deeper parts; lymph exuded copiously from the cut surfaces; numerous capsules, with the contained worm, were observable as whitish objects, isolated or in clusters, in all parts of the tissues. The thickness of tissues between the surface and the underlying tissue measures 30 to 60 mm., notwithstanding the fact that the hardening process has contracted the subcutaneous connective tissue, through loss of the lymph, into dense fibrous bundles, so that it no longer bears a resemblance to what it was in the fresh state. The corium in the same piece may be said to be 3 to 6 mm. thick: it seems to be on the whole considerably thicker than in the normal state.—Abstracted from Ijima, 1905.

Further medical details are not given by Ijima, but he states that Professor Kondo will publish a report of clinical and pathological observations. I have not as yet learned of the publication of the report in question.

From the foregoing abstracts, the suspicion immediately arises that in Florida we have a skin infection, hitherto unrecognized for the American continent, and similar to, perhaps identical with, an infection recognized only on one former occasion, namely in Japan.

It is interesting to note the following comparison in the cases, without laying too much stress upon these points at present:

Both cases occurred near the eastern shore of the continents in question (Old World, between  $35^{\circ}$  and  $36^{\circ}$  N.; and New World, between  $27^{\circ}$  and  $28^{\circ}$  N.); both patients lived in cities or towns located directly on the water, very near larger bodies of water (Pacific Ocean and Gulf of Mexico): both patients, though of different sex, were adult (twenty-three years male, thirty-one years female) when the infection was first noticed: both patients belonged to the poorer classes of society: one had a professedly fish diet, the other lives in a country where a fish diet is very common: both infections are of long standing (in one case over three years, in the other case about twenty-five years): in both cases the number of individual worms present was very great: both observers (Ijima for Japan, and Gates for Florida), independently call attention to the acne-like lesion resulting from the infection: each patient is a native of the country in which the case was found, and in neither case is there any history given of the patient's having visited the country of the other patient.

*Nature of the parasite.*—A microscopic examination of the



worms forwarded by Doctor Gates showed them to contain calcareous corpuscles, hence the diagnosis of cestode infection was immediately established in this case on the same basis as was the diagnosis in the Japanese case. The cestode in question is a larval form, without suckers on the head, and, as far as seen, without any primordium of genital organs. The most striking feature of the worm is its irregular shape, with tendency to proliferation by forming supernumerary heads. These characters immediately bring up for consideration the question as to whether the worm found by Gates is identical with the parasite recently reported by Ijima (1905) for Japan. As the American and the Japanese parasites are very closely related, possibly specifically identical, it will be well to follow the two in comparison. In doing this, it will be advisable to abstract Ijima's paper rather liberally, more especially since it is published in a journal not generally accessible to dermatologists.

*The worm capsule of Ijima's parasite.*—Ijima (1905, 4-5) states that the worm capsules of various sizes occur in abundance in all parts of the subcutaneous tissues, and less abundantly in the corium. They were also observed in some numbers in the intermuscular connective tissue, but not in the muscles themselves, so far as such observation could be made on parts incidentally exposed during the surgical operation. In the corium, the capsule may be situated so close to the epidermis that the latter is externally raised into an acne-like prominence. On a piece of the preserved skin, about two inches square, Ijima found at least four such prominences, which as seen on the surface, appear smooth and less pigmented than the surrounding parts. Capsules so superficially situated might easily be ruptured by force applied through the skin from without.

In shape, the capsules are generally subspherical or ovoid. While the smallest of them are considerably less than 1 mm., others measuring 1 to 2 mm. or more are of quite common occurrence; one of the largest seen was elongate, 2.5 mm. broad, by 8 mm. long; another measured 3 mm. by 6 mm. The larger capsules were found only in the subcutaneous parts; not in the corium.

The capsular wall, consisting of a dense felt-work of connective tissue fibers of the host, may reach nearly 0.33 mm. in thickness; in sections the capsules may appear not unlike a transversely cut blood-vessel on account of the tough and compact looking wall; under a hand-lens, the inner surface of the capsule appears smooth; in some of the larger cysts, the internal cavity is traversed by branching trabeculae; microscopically, the wall either shows no special limiting

structure, or is lined with a deposit of granular coagulum or tissue debris.

*Abundance of parasite.*—In Doctor Gates' letter of June 17, he states that his "patient has thousands of" these parasites.

In the Japanese case, a section of about 11 sq. cm. showed nearly 60 capsules; in the most thickly infested portions of the thigh, there was 1 capsule to every 20 sq. mm. of cut surface, or to every 100 cu. mm. of infested tissue; this gives 1000 capsules per 100 cu. cm. of tissue. It was estimated that there must have been considerably over 10,000 capsules in the left thigh alone.

*Worms without capsules.*—Scarcely any of the worms Gates forwarded to me bore any remnant of the cyst. Very probably most of these specimens were originally encysted and were freed from their cyst by Doctor Gates before he forwarded them.

Comparatively young, slender worms were found by Ijima free in the connective tissue, that is, not surrounded by a capsule.—Ijima, 1905.

*Movements of the worm.*—Not having seen the worm alive, I can give no details regarding movements.

Ijima reports that the living worms when taken from the patient, showed slow movements of extension and contraction, but effecting little or no change in position; upon cooling, the worms no longer exhibited such movements; in case of worms placed in salt solution, motion could be revived, up to a period of four hours, if the parasites were slightly warmed.

The head (narrow end) was the most motile, evaginating and invaginating at the apex, in addition to shortening and extending; the terminal, but inconstant, depression in some cases, reminded the observer of a terminal sucker, such as seen in the fish bothriocephalid *Cyathocephalus*. In addition to a motion as if feeling about, the head started a lively peristalsis, from before backward; such combined movements would aid the worm in penetrating and moving through tissues.

The broader parts of the body showed at most slow vermiform movements, with more or less constant indentation at the extreme hind end.

*The head.*—Ijima states that the head of his parasite is devoid of any definitely formed or permanent organ of attachment. This holds true also for the worm found by Gates. In some few specimens a slight apical depression is observed, but as the material is preserved in alcohol, this might possibly be either an artifact or a depression due to sudden contraction on the part of the worm.



FIG. 1.



FIG. 2.



FIG. 3.



FIG. 4.







FIG. 5.



FIG. 6.



FIG. 7.



*Encysted worms.*—Gates writes that he found as many as three worms in one cyst. This condition is doubtless due, as Ijima explains also for his case, to the tendency of the worm to multiply by budding.

Ijima reports that the smaller capsules usually contained only a single worm; in the larger cysts, however, two or more worms or pieces were more frequently found; from one capsule, 5 worms were obtained, and from another, 7 worms.

*Size and shape.*—The longest specimen I have observed is 12 mm. in length. Some of the worms are simple elongated bodies, either more or less flattened, or nearly round in transverse section. The larger specimens, however, assume all manner of bizarre and irregular shapes which cannot be well described. These variations in form may be reduced to a progressive, but irregular formation of buds, the apex of each bud representing a structure similar to the cephalic end of the original worm; the form varies, of course, according to the number, position, contraction, etc., of the buds, and according to the contraction of the parent stock. Figs. 5 to 15 will give an idea of the great variety of forms found.

According to Ijima, many of the worms are small, filiform, about 0.3 mm. in diameter, 3 mm. in length; others attain, even when moderately contracted, 12 mm. long by 2.5 mm. broad. In some specimens, the body is flattened, dorso-ventrally, but there is no clew to which is dorsal and which is ventral surface. In its simplest form, the worm is plerocercus-like, or narrow at the head and broader caudad, when moderately contracted, or irregularly cylindrical when strongly contracted.

This simple plerocercus-like larva, when encysted, may assume a rather complicated structure, due to its ability to form buds or supernumerary heads, especially on the lateral edges of the flattened body in younger specimens, but quite irregularly in the more complicated older forms. When the heads detach themselves, they represent small independent plerocercus-like larvæ, and their method of formation explains the presence of several worms in one cyst.

The formation of heads, in the manner prescribed, naturally tends to give the worms a very irregular outline; this irregularity is increased by the formation of subcuticular bodies which Ijima interprets as food material. Ijima assumes that these young heads leave the capsule and wander through the connective tissue until they grow in size and then in turn form a capsule of their own.

*Microscopic anatomy.*—According to Ijima, the cuticle of the

Japanese form may attain 8 mm. in thickness; the dermal musculature consists of external circular and internal longitudinal fibers. These statements are correct as applied to the Florida form also.

The *calcareous corpuscles* of the Japanese worm are described by Ijima as spherical or ellipsoidal, 7.5 to 12 mm. in diameter, and abundant in all parts of the parenchyma except in the head, in which they are lacking. In the Florida form also, the calcareous corpuscles are abundant; they vary in size from 8.8 mm. to 17.6 mm.; in shape they are spherical to ellipsoidal. Thus, in reference to the size of the calcareous corpuscles, there seems to be a slight difference between the American and the Japanese parasites.

*Reserve food bodies.*—Ijima has described as present in the parenchyma, certain bodies which he views as reserve food material. Usually they are roundish or oval, 100 to 300 mm. in diameter; but they may become elongate and very long.

In the Florida parasite, similar bodies are present, but in the specimens thus far examined microscopically, they do not seem to be quite so numerous or quite so large and prominent as described by Ijima for the Japanese form. It is possible, however, that this is a matter of individual variation.

*Excretory system.*—The parasites as described by Ijima contain an extensive system of anastomosing excretory vessels. In this respect the Florida form agrees with the Japanese species. Some of the canals are quite large, others are smaller, some are very small. Ijima calls attention to the absence of excretory vessels in the peripheral zone of the posterior part of the body; he also states that he was unable to find any opening.

In sections of one of the Florida parasites, fine canals were found rather close to the cuticle, but because of the branched condition of the worm it is difficult to state just what portion of the body this was; it was not, however, a head. Likewise, in one case, sections of a pore (Fig. 18) on the surface, with a centripetally directed canal were distinctly seen. In view of the absence of genital organs, one is naturally inclined to look upon this pore as belonging to the excretory system.

The longitudinal *muscles* of the Japanese worm are described as well developed, and in addition there is a less strongly developed set of muscle fibers running in different directions but mainly in the transverse plane. Near the head, these transverse muscles may be quite regular (some dorso-ventral, others crossing these at right angles), but in thicker portions of the body, they may become very



irregular. This description applies in a general way to the Florida form also.

*Nervous system.*—Ijima noticed a pair of longitudinal, lateral nerve trunks in the cephalic portion; they seemed to unite close to the tip of the head. In several sections of the Florida worms, nerves were distinguished, but details as to their topography were not studied.

*Life cycle.*—Experiments to raise the adult stage by feeding the Japanese parasites to cats, dogs, and pigs, were negative.

As all of my own material was preserved, no experiments could be undertaken. The question as to the source of infection, life cycle, etc., must be left open for the present.

*Systematic position.*—From the general structure, especially from the presence of calcareous corpuscles, it is clear that both the Japanese and the Florida parasites are cestodes; the absence of suckers seems to place both forms in the old family Bothriocephalidæ, now known as Dibothriocephalidæ. Further than this, the exact systematic position is not clear at present and can not well be determined until the adult stage is known.

So far as can be judged from the material thus far studied (prior to the meeting of the International Dermatological Congress in New York, Sept. 9, 1907), the Florida form must be considered as very closely allied to, perhaps specifically identical with, the Japanese form. The only anatomical point of difference thus far brought out is a difference in size of the calcareous corpuscles; the only biological difference known is the habitat—in two widely separated localities.

Ijima points out the structural affinities between the Japanese form and the bothriocephalid larval *Sparganum* of Diesing; he refers also to the similarity between the Japanese form and "*Ligula mansonii*" (*Sparganum mansonii*).

*Sparganum* is an artificial collective group of worms, distinctly proposed not as a systematic unit, but as a collective group of larval bothriocephalid cestodes. Under the International Code of Nomenclature (1907), such names may be proposed as a matter of convenience and may be used as if they were generic names; they do not require any type species and hence do not compete with generic names under the Law of Priority.

Both the Japanese and the American parasite may be temporarily classified in *Sparganum*.

The Japanese worm was originally published under the two

names *Plerocercoides prolifer* and *Plerocercus prolifer*, but Ijima distinctly states that he uses the names as a matter of convenience, namely, not in a taxonomic sense. Certain objections arise, however, to the use of the names *Plerocercus* and *Plerocercoides* in this connection and on this account I transferred (1906a) the parasite to *Sparganum*.

The nomenclatural points involved are somewhat complex and it may be well to explain them in this place.

Under the original International Code, the names of larval cestodes, and of certain other forms, were for special reasons exempted from the Law of Priority. Later (1901) contrary to the judgment of helminthologists, this exemption was done away with.

To apply the Law of Priority consistently to all such larval names would be almost an impossibility. There are, in fact, many names which have been proposed, not in a generic sense, but as names of admittedly artificial groups which were used simply as a matter of temporary convenience, and it was on account of a failure to distinguish between names of this category and names proposed for supposed genera, that the exception was rescinded. In 1907, at the Boston Congress, an helminthologist proposed the following, which was adopted as part of the Code:

“Certain biological groups which have been proposed distinctly as collective groups, not as systematic units, may be treated for convenience as if they were genera, but they require no type species. Examples: *Agamodistomum*, *Amphistomulum*, *Agamofilaria*, *Agamomermis*, *Sparganum*.”

As will be shown below, *Plerocercus* and *Plerocercoides* also now come under this paragraph. As matters now stand, it is necessary to show that a name was distinctly proposed to designate an artificial collective group in order to bring it under this provision. A name like *Cysticereus* or *Echinococcus*, originally proposed as generic, not distinctly to cover an admittedly artificial group, is subject, now as before, to the Law of Priority.

The term *Plerocercus* (πλήρης, full; ἔρπος, tail) was proposed by Braun (1883a, 98) as designation for the parenchymatous cysticerci (namely, those the caudal portion of which contains no fluid) as distinguished from the bladder worms, or true cysticerci; thus, it is a descriptive term for a stage of development (larva) possessing certain characters, but not the designation of a systematic unit. As examples, Braun cited a *Plerocercus* (*Dithyridium lacertæ* Val.) of lizards and a *Plerocercus* of *Tetrarhynchus*. The



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FIG. 8.



FIG. 9.



FIG. 10.







FIG. 11.



FIG. 12.



FIG. 13.



plerocercus of the lizards happens to figure in a true nomenclatural sense; namely in the genus

DITHYRIDIUM Rudolphi, 1819

1819: *Dithyridium* Rud., 1819a, 559 (*lacertæ viridis*, *lacertæ muralis*; Europe. Type by later absolute tautonymy. *Piestocystis dithyridium*=*Dith. lacertæ*).

1850: *Piestocystis* Dies., 1850a, 478, 494-496 (*Dithyridium* 1819, renamed; includes as valid species *P. crispa*

In 1866, Baillet mentioned a parenchymatous cysticercus (Rud.), *P. rugosus* Dies., *P. variabilis* Dies., *P. dithyridium* Dies., (for *Dithyridium* of Rud., namely, *D. lacertæ* Valenciennes, 1844).

This genus is based upon a larval tapeworm (a plerocercus) provided with four suckers, and is classified in the family *Tæniidæ*; the type species occurs in Europe in lizards of the genus *Lacerta*. (namely, a plerocercus) from the abdominal cavity of the cat and dog. In 1882 or 1883, Blumberg described this form as a new species under the name *Cysticercus elongatus*; the latter name, however, was already preoccupied (cf. *C. elongatus* Leuck., 1842). In 1885, Railliet renamed this form *Cysticercus bailleti*, and in 1893a, p. 314, he classified it in the genus *Dithyridium* as *D. elongatum*. In the meantime, however, Neumann (1892a, 537-539, Figs. 292-293) referred to the same parasite as "*Plerocercoides bailleti*," clearly using a Latin binominal nomenclature.

The name *Plerocercoides* as used by Neumann is traceable to Braun (1882a, 100), who used a German term "*Plerocercoiden*" to designate certain larval forms which differed from the cysticercoids by having parenchymatous tails; as examples Braun cites a form which occurs in the body cavity of *Trichodectis canis*, and the young (*Gyporhynchus*) of *Tania macropeos* and *T. unilateralis*. Blanchard (1888a, 491) used a French form (*Plérocercoïdes*) of the word, while Neumann (1892a, 537) seems to have first used the Latin *Plerocercoides*. From Neumann's text, however, it is clear that he based his name on Braun's "*Plerocercoiden*," hence Neumann's *Plerocercoides* is not a generic name but the designation of an artificial collective group, hence also the type designation (*bailleti*) suggested by myself in 1906 is not necessary under the new (1907) Code.

As a plerocercus may be the larval form of species belonging

to widely distinct families, even to different orders, it is wise not to use the combination *Plerocercus prolifer* in case a better designation is available; this point probably occurred to Ijima, for he used the combination only once. *Plerocercoides* is also open to the same objection, and in the only use of the term prior to Ijima, it was used for a *Dithyridium*.

It so happens that Diesing proposed a name which is open to fewer objections. This is the

Collective Group SPARGANUM Diesing, 1850.

DIAGNOSIS.—*Dibothriocephalidæ*: An artificial collective group to contain larval stages of bothriocephalid worms, which have not reached a stage in their development that they can be determined generically.

Such groups do not require a type species.

In 1906, I placed Ijima's form in this group as the proliferating

The Proliferating Japanese Tapeworm Larva—(Ijima, 1905) Stiles, 1906—*Sparganum Proliferum*.

SPECIFIC DIAGNOSIS.—*Sparganum*: Larva may attain 1 to 12 mm. in length and 2.5 mm. in breadth; head narrower and more motile than posterior end, and may show an apical depression which, perhaps, serves as sucker; no true suckers or other organs of attachment present. Calcareous corpuscles spherical or ellipsoidal, 7.5 to 12 mm. (Japanese worm) or 8.8 to 17.6 mm. (Florida worm) in diameter, and situated in any part of body except head; irregularly distributed reserve food bodies present in older specimens, but they later undergo disintegration; genital organs not present; longitudinal muscles better developed than either dorso-ventral or transverse system; transverse fibers do not divide body into cortical and medullary layers; excretory system well developed, consisting of larger approximately longitudinal branches, with anastomoses. The larvæ possess the power of multiplying by transverse fission and of forming supernumerary heads which may become independent. Adult unknown.

HABITAT.—Encysted in subcutaneous tissue and elsewhere in man.

GEOGRAPHICAL DISTRIBUTION.—Found but twice; once by Ijima in Tokyo, Japan; once by Gates in Manatee, Florida.

Whatever results may be obtained from examination of further



material, which I could not study prior to the meeting of this Dermatological Congress, at the present time I do not feel justified in separating the American form specifically from the Japanese species, despite the difference in geographic distribution and the slight difference in the calcareous corpuscles. That the adult stage may eventually prove the Florida form to represent a distinct species, seems entirely possible; in fact, when we consider the seeming isolation of the two cases, this appears probable. At the same time, if it should eventually be shown that the infection was contracted from eating marine fish, the possibility would not be excluded that the two forms are identical, despite the wide difference in locality. In the interest of conservatism, accordingly, I classify, for the present, the two in the same species.

In an earlier paper (1906a, 86) I called attention to the fact that because of the remarkable reproduction of the larval stage described by Ijima, a new genus would probably be justified. I hesitated somewhat to make the genus without seeing actual specimens. After examining the American specimens, I am further convinced of the probability that the worm in question represents a new genus.

The proposition of a new generic name at this time, presents both advantages and disadvantages. To continue to call the worm *Sparganum* shows that the family position is recognized, but that the adult is unknown; the worm is, however, so different from the other forms of *Sparganum* that it seems advisable to bring out this difference in a generic name; further, as long as a new generic name seems almost inevitable, it would appear wise to introduce it as soon as possible, in order to reduce its competition (through homonymy) in the future. On the other hand, to introduce a new combination at present, does not seem absolutely necessary; its introduction would destroy the advantages we have at present in the use of the name *Sparganum*.

There is, I believe, a conservative method by which the advantages of both plans may be united, namely, by the introduction of a new subgeneric name. This course permits the continuation of the use of the name *Sparganum*, and at the same time brings out the fact that the worm is very different from the other forms of *Sparganum*; further, it procures for the name any advantages in homonymy which may be gained by its proposal this year instead of later.

As such subgeneric name, I propose—

GATESIUS<sup>1</sup> n.subg.

DIAGNOSIS.—*Dibothriocephalidæ*, ? *Ligulinæ*, classified temporarily in *Sparganum*. Adult unknown. Larva, in its simplest form similar to the plerocercus of *Dibothriocephalus* except for suckers, which are absent; possesses the property of branching, and of reproducing by budding, thus forming supernumerary heads which become free from parent and assume the simple plerocercoid form. Body contains numerous calcareous corpuscles, richly developed canal system, and may contain reserve food bodies.

TYPE SPECIES.—*Sparganum* (*Gatesius*) *proliferum* (Ijima, 1905) Stiles, 1907, from connective tissue of man; Japan.

It will be noticed that from the form of this proposal, the name *Gatesius* is proposed not as a collective group, similar to *Sparganum*, but as a true systematic name of subgeneric rank. When the adult form becomes known, the species should be taken out of the group *Sparganum* and this subgenus raised to generic rank.

All drawings made by Leonard H. Wilder.

## DESCRIPTION OF PLATES.

Figs. 1-4.—Four photographs of Gates' patient in Florida, showing acne-like condition and enlarged breasts due to infection with *Sparganum proliferum*. (Original; photos kindly furnished by Doctor Gates.)

Fig. 5.—*Sparganum proliferum*, in part in a cyst. Original X. 10.

Fig. 6.—*Sparganum proliferum*, escaped from the cyst. Original X. 10.

Figs. 7-15.—Nine specimens of *Sparganum proliferum*, showing various forms, buds, and supernumerary heads. Original X. 10.

Fig. 16.—Section through a cyst, with the escaped *Sparganum proliferum*. Original. Greatly enlarged.

Fig. 17.—Section through the reserve food particle (see x., fig. 16). Original. Greatly enlarged.

Fig. 18.—Section showing: large excretory canal, smaller canals, calcareous corpuscles, and a pore. Original. Greatly enlarged.

<sup>1</sup> Dedicated to Dr. H. Gates, of Manatee, Florida, who found the first American case.



FIG. 14.



FIG. 15.

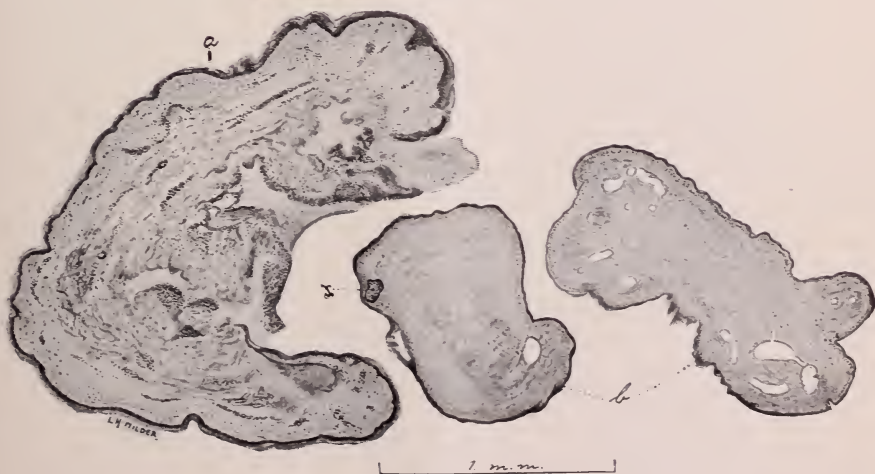


FIG. 16.





## CHEILITIS EXFOLIATIVA

By Dr. M. L. RAVITCH, Louisville, Ky.

I THINK Dr. H. Radcliffe-Crocker gave the above disease an appropriate name, since the most prominent symptom is exfoliation. Some authors are inclined to recognize it as a form of eczema, as is the case with Besnier and Doyon, who called it "eczema exfoliant des levres," some insist it acts like psoriasis as is the case with Bateman, who calls it psoriasis labialis. Since a few cases were associated with seborrhea, Rayer is inclined to think this disease a part of a seborrheic process and calls it "pityriasis des levres." Drs. Hyde and Montgomery in their text-book insist that the affection should not be confounded with eczema, and call it "Cheilitis Glandularis Aposthematosa." So does Stelwagon and Volkmann. Lately Dr. Hyde recognized this disease as an instance of infective folliculitis.

From all the inquiries I have made I find that so little has been written about cheilitis exfoliativa, that very few of the text-books go into the details of this disease. That quite a good many cases can be found there is no doubt; it is only to be regretted that many general practitioners, not knowing that this is a rare form of disease, overlook it as an insignificant affection, such as chapped lips or fever blisters, for instance. To describe this disease would be a repetition of what little has been written about it; the uncertainties of its etiology and pathology; the failures of the former methods of medical treatment. The symptomatology of the disease is always uniform. The lower lip is usually the one that is affected. The disease always starts with an erythema or œdema, the muciparous glands being subsequently involved. Follicular openings may at times show a scant exudation of muco-purulent secretion with excessive epidermis formation and cornification. In one of my cases the skin of the chin became erythematous. Later on the thick scales become loosened (process of exfoliation), and the lip underneath it becomes dry, glazed, and at times fissured. I never found, as in Duhring's cases, that the disease was associated with a depressed state of the nervous system. In not one of my cases was seborrhea of the scalp associated. Clinically, the disease is closely allied to Paget's disease. Like the latter disease it may start with a sclerotic eczema, later it may assume the form of a dry, scaly or branny encrustation affecting the entire surface of the lower lip, which is darker colored, firmer, less pliant

and elastic than its upper fellow. It apparently has all the phases of Paget's disease, and at times, as in Paget's disease, may become malignant. Perhaps in many a case of epithelioma of the lower lip the initial symptoms were the same as found in cheilitis exfoliativa. In Jamieson's case of cheilitis exfoliativa the thickening of the prickle cell layer was so well marked that Leith thought it to be a mild form of epithelioma. Little, however, is known of its pathology. No pathogenic microbe was ever isolated, though attempts have been made in that direction. Though Dr. Hyde recognizes this disease as an instance of infective folliculitis, Dr. Heidingsfeld was right when he wrote me: "Researches in this direction, as far as I am able to determine, are inclined to show that parasitology is rather accidental than causal in nature." From my own observation I am forced to look upon causal cheilitis exfoliativa as a clinically very important and pathologically most interesting form of keratosis, as found in Paget's disease of the nipple or in other dermatoses where excessive epidermis formation and cornification are the chief features. Whether this process is primarily a hyperplasia of the rete with induced secondary changes or whether it originates as an inflammation of the papillary layer of the corium, producing cell infiltration and vascular dilatation, is only a matter of speculation. Though therapeutic results in former years have not been the most gratifying, the latest reports are very encouraging. Mild antiseptics and X-ray, if they did not accomplish a radical cure, have greatly benefited the disease. Dr. Hyde had best results with very cautious use of X-ray and local antiseptics. Dr. Gilchrist claims that X-ray treatment is the most efficacious. He applies enough to produce reaction. In two private cases he used the X-ray and the result was a cure in both instances. Pure carbolic acid was used by him in one case with great benefit but no cure. In my own cases I used different methods, and the best way to describe them is to give a summary of my cases up to date:

CASE 1: W. P., age 39. Was referred to me by Dr. T. Kinnard of Lexington, Ky. Patient was a farmer and stock raiser. Family history good. Denied ever having syphilis. Suffered from leukokeratosis buccalis for over five years. While the case was sent to me for leukokeratosis buccalis only, his lower lip had a typical form of cheilitis exfoliativa. Under 15% solution of nitrate of silver by cataphoresis the lip got entirely well, while the leukokeratosis buccalis persisted, though greatly improved.

CASE 2: On March, 1907, I was consulted by H. F., a local dry goods merchant, age 46. Family history good. Never had

any venereal disease. He was an inveterate smoker. For the last two years his lower lip began to feel tight and itchy. At first he thought he had chapped lips, but when he noticed exudation, encrustation and exfoliation, he consulted several physicians, and one of them pronounced it malignant. On examination, I found it to be a usual type of cheilitis exfoliativa. The mucous and salivary glands of the mouth were not affected. After 14 X-ray seances, patient was discharged cured. I saw the patient two weeks ago and not a sign of the disease was noticeable, except that the skin on the lower lip was of darker color than the upper lip.

CASE 3: Dr. S. H. R. of Shepherdsville, Ky. Age 35. Was referred to me by Dr. W. Boggess, a very prominent physician of this city. Patient's family history good. Always enjoyed good health. Symptoms identical with case No. 2, except exfoliation more pronounced. Was seen by Dr. Heidingsfeld at the Ohio Valley Medical Society which met in Louisville in 1906. The latter pronounced it lupus erythematosus. The examination was made in the evening and was a hasty one. As the patient could not come to my office regularly I applied a 15% solution of nitrate of silver, followed by Lassar's paste daily. Later on I used X-ray. Patient improved.

CASE 4: The patient was referred to me by case No. 2. It is a peculiar thing that patients with a certain disease always know people suffering from the same affection. In this case patient was a whiskey drummer, age 48, with nothing of importance in the medical history, except that he suffered from rheumatism. Patient complained of dryness in the mouth and contraction of the lower lip. The symptoms were the same as in all previous cases, except that the muciparous glands were more involved, the exudation and crusting more pronounced. As patient greatly objected to X-ray exposures, I used Tr. Iodine by cataphoresis and Lassar's paste as a daily application. Patient showed great improvement.

In addition to the foregoing cases, I wish to say that two more cases were reported to me, one by Dr. W. Boggess and one by Dr. F. T. Fort, both of this city.

How long may the relief or cure be expected to last, I cannot say. There is no doubt in my mind that some cases will relapse in spite of energetic and seemingly successful treatment. It might be said that when the true pathology of the disease is established, we may not have to work in the dark, as we do now. For the present all attempts to arrive at the real pathological basis have amounted to naught.

## SOCIETY TRANSACTIONS.

### BOSTON DERMATOLOGICAL SOCIETY.

January Meeting, 1908.

Dr. ABNER POST in the chair.

#### **Tinea trichophytina (Megalosporon Ectothrix). Presented by Dr. C. J. WHITE**

The duration of the affection is nine days. The patient is always shaved by a barber. The eruption is entirely limited to the under surface of the chin. Over this region are numerous discrete, round, scaling lesions varying in size from the head of a large pin up to a three-cent piece. Scaling is especially marked on the peripheries of the lesions, while the centers are clearer and covered with fine, furfuraceous scales. A few lesions are small, crusted and situated about the hairs. The lesions are pale red and as a rule are not crusted but covered with scales. According to the history they all appeared at about the same time. Under the microscope spores and mycelium of the megalosporon ectothrix were found.

#### DISCUSSION:

Emphasis was laid upon the marked resemblance which the lesions bore to impetigo contagiosa of the small type, and upon the fact that so many lesions appeared almost simultaneously, which is very unusual in ring-worm.

#### **Mycosis Fungoides. Presented by Dr. JOHN T. BOWEN.**

This woman, 56 years of age, has had the disease for ten years, and was shown at a previous meeting of this society. Seven weeks ago she left the ward for cutaneous diseases of the Massachusetts General Hospital with the skin showing very few tumors and with very little generalized infiltration of the skin. Since leaving the hospital she has returned for X-ray treatment but twice. More tumors have developed in the interval, and she states that she has lost fifty pounds in weight. Scattered over the body and to a lesser degree over the extremities are a number of mushroom-like tumors, some of which are two inches in diameter. They are considerably elevated, red in color, with verrucous surfaces. From between the projections exudes considerable secretion. In addition, the eczematous plaques, which at the time of discharge from the hospital were thin and desquamating only slightly, have again become thickened and covered with large lamellate scales. There is also noticeable general glandular enlargement. The patient has recently been readmitted to the hospital and the X-ray treatment which was so successful before has been begun again.



**Scleroderma.** Presented by Dr JOHN T. BOWEN.

This man, aged 50, is shown because of the condition of his hands, abdomen, chest, and neck. He is an Armenian and in childhood had a disease of the scalp which resulted in a marked thinning of the hair with the formation of atrophic cicatrices; evidently favus. He also had in childhood an ulcerative disease of the right cheek which has left a scar; probably due to aleppo boil. Since coming to this country he has been employed in an establishment where his duties were to wash bottles under a running stream of cold water. Nine months ago he noticed that on removing his hands from the cold water, they felt hot. Soon they began to grow stiff. Motion of the fingers gradually became more difficult, until now not over one-third of the normal motion remains. Three months ago he noticed for the first time that his body, in certain places, was growing stiff. There were no subjective symptoms. The patient had gonorrhœa ten years ago. He admits of the moderate use of alcohol.

The fingers and dorsa of both hands are affected. The skin over the fingers is drawn very tense, limiting motion greatly. The skin is hard, of leathery consistence, and can nowhere be picked up. Its color is cadaverous. To the touch the fingers are cold. Over the backs of the hands the skin has the same cold, hard, tense feel as over the fingers, but is of a more congestive color. Along the borders of the diseased parts the skin is so greatly thickened that it is thrown up into areas of irregular shapes and sizes and with uneven surfaces. Surrounding the umbilicus for a distance of two or three inches and extending upward over the sternum, can be felt a well defined thickening of the skin which is firm, smooth, resistant but not hard, not elevated above the general surface, and which is hyperpigmented over the affected area. Over the sternum near the clavicles and over the back of the neck are a number of areas of oval, round and linear shapes and of small size which are sharply defined, atrophic, and of a dead white color. The general physical examination was negative.

**DISCUSSION:**

Attention was called to the areas on the neck which are often seen in cases of generalized scleroderma. In this connection a case was recalled whose face was so streaked with ridges as to look as if it were caned. The swollen appearance of the hands was thought unusual and led to the inquiry if the preliminary condition were œdematous.

**Tuberculosis Cutis.** Presented by Dr. HARVEY P. TOWLE.

This boy, aged 11, presents multiple tubercular lesions of the skin which, judging from the history and from the X-ray plates here shown, are due to primary foci in the bones. The lesions on the hands and fingers began six years ago, and those on the toes five years ago. When the patient was in the cutaneous ward of the Massachusetts General Hospital in 1904, he developed an abscess of the arm which the surgeons believed resulted from a tubercular dactylitis with secondary infection with

pyogenic bacteria. In 1904, owing to extensive necrosis of the second and third right metacarpals, these bones were removed and a sinus leading down to the fifth metacarpal and a necrotic area over the fourth metacarpal were thoroughly curetted at the same time. The wounds from the operation healed completely in three to four weeks.

In September, 1907, the patient returned to the Hospital and was transferred from the Surgical to the Skin Department. He presented at this time much the same appearances as are seen to-day. There were lesions on both hands and feet. On the left index finger and at the base of the left thumb were areas about the size of a twenty-five cent piece, while on the dorsum of the right hand was an elongated lesion with central scarring. On the dorsum of the left foot just above the toes was an area two inches in diameter, while just below the left external malleolus were three lesions varying in size from a twenty-five cent piece to twice that size. On the dorsum of the second toe of the right foot and on the foot itself were other similar lesions. All these lesions were elevated above the general surface, surrounded by a narrow red areola, and except those below the left external malleolus, thickly crusted, with verrucous surfaces. The three lesions on the outside of the left foot were fungoid in character, raised about one-fourth of an inch, with dull red areolæ and rounded edges of a whitish color and with some central crusting. As the boy's father refused to permit any sort of operation, the treatment has necessarily been limited to external applications of which a variety has been tried. Radiographs were taken when the patient was in the ward in 1904, and again in 1907, both of which showed the presence of foci in the bones, but with a marked diminution in size in the later plate.

### **Two Cases of Syphilis.** Presented by DRs. C. J. WHITE and BURNS.

*Case 1.* Miss D., aged thirty, single. In November last a "pimple" appeared on the right cheek. This papule grew and became a "sore" and a week before entrance to the hospital the lesion was poulticed and later incised by a physician. Two days before admission to the skin ward an eruption was noticed on the back, abdomen, legs and face. On January 16, 1908, the patient entered the hospital and showed a universal flat maculo-papular eruption, dull red in color. The original sore on the cheek, which was interpreted as the primary lesion, resembled an open furuncle with considerable surrounding infiltration. The woman received daily injections of one-sixth of a grain of corrosive sublimate. On January 23, salivation appeared and it was noted that the cutaneous outbreak was rapidly fading. On January 31, there was only a faint scar at the seat of the primary lesion, and the roscola was almost invisible. Thus in two weeks by this rather intensive mercurialization practically all outward appearances of the disease had been dissipated.

*Case 2.* G. Z., aged thirty-six, married. Four months ago the man fell on a sidewalk and bruised his arm. This wound did not heal readily,

but at the end of a month it had resolved itself into a blue-red scar the size of a quarter dollar. Three weeks before entrance to the hospital an eruption was noted, accompanied by headache, malaise and finally sore throat. The man was a knife-sharpener in a hospital and one can't help wondering if the original abrasion could have been infected by one of the hospital knives.

On admission to the ward the remains of the extra-genital chancre (?) consisted of infiltrated blue-red cicatrix, while over the whole body and face appeared a dusky-red, discrete, round or oval maculo-papular eruption. Injections of corrosive sublimate, grs. 1/6, were given daily and three days later the roseola was distinctly less evident. Eleven days after the first injection all cutaneous evidence of the disease was gone and the patient felt well.

These two cases were presented to illustrate the remarkable rapidity with which certain syphilides respond to injections of the soluble salts of mercury. The exhibitors wished to emphasize the fact that in their experience the more dangerous insoluble preparations were never called for in syphilis as it exists in Boston.

#### **A Case of Ringworm of the Beard.** Presented by DR. C. J. WHITE.

The man knew nothing about the cause of his condition which had existed for ten days. When first seen the whole bearded face was a lumpy mass out of which abundant pus could be expressed. The microscope showed ample evidence of the megalosporon ectothrix, both on hairs and in the pus.

Hot fomentations and applications of an ointment containing carbolic acid, naphthol and flowers of sulphur had produced a marked effect in a few days and the exhibitor stated that in his opinion the X-rays were unnecessary in this type of sycosis which usually yielded rapidly to the above method of treatment.

#### **An Unusual Case of Ichthyosis.** Presented by DR. GEORGE J. HARDING.

Boy, nine years of age. The face, borders of the ears, flexures of the elbows, the axillæ, the popliteal spaces and sacral and genital regions are the principal seats of the disease. On these situations the skin is thickened, scaling, raised above the general surface and more or less pigmented. The scalp is dry and thickly covered by furfuraceous scales. The hair, moderate in amount, is dry and brittle; over the occiput are several dime-sized irregular patches of alopecia. The nails of the fingers and toes generally show dystrophic changes—thickening and brittleness; the matrices of several are inflamed and suppurating. Six months ago the body was almost entirely covered by a scaling eruption similar in character to the present condition, which, under the application of ointments containing boric acid, ichthyol and resorcin, cleared up.

The following history was obtained from the father, a Canadian,



living in western Massachusetts: The boy is a deaf-mute and nearly blind. There is no history of skin disease on the side of either of the parents. There are ten other children in the family, all of whom have healthy skins and no defect of hearing or vision. At birth it was noticed that the child had a somewhat roughened scaling skin. When he was about a year old the skin began to grow more rough, beginning in a few areas and gradually increasing until almost the entire cutaneous surface was covered. At about this time it was also noticed that he was deaf-mute. Defect in vision did not begin until several years later, but it has been steadily increasing, so that he can now see very little. The oculist who examined the eyes reported—"a peculiar and unusual form of keratitis which might be compared to the keratotic condition of the skin." Except for the disease of the skin and special senses the boy has always been healthy and bright mentally.

It may be interesting to note that the boy's mother had been inclined to attribute the trouble to atropine which she took, during pregnancy, for ptialism.

#### DISCUSSION:

In view of the seats of predilection, the flexures of the elbows, popliteal spaces and axillæ, the picture of the dermatosis did not accurately conform to that of ichthyosis, which shows a preference for the extensor surfaces. Generalized keratosis seemed a name better applicable to the process. The thickened verrucous character of the skin in places suggested ichthyosis hystrix. Whatever the designation to be applied, the condition was evidently a congenital diffuse hyperkeratosis of the skin. The analogy of the disease of the cornea to that of the skin was thought interesting and noteworthy. It was suggested that examination of the ears might reveal still further relation to the cutaneous disease.

F. S. BURNS, Secretary.

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### CHICAGO DERMATOLOGICAL SOCIETY.

Meeting of March 27th, 1908.

Dr. JAMES NEVINS HYDE, Chairman.

**Case for Diagnosis.** Presented by Dr. Anthony.

The patient was a woman 45 years old. She had lived in New Orleans twelve years prior to her removal to Chicago, two years ago. The eruption had been present for six months. It was located exclusively on the face, with a few scattered lesions on the scalp and anterior surface of the chest. The lesions present were nodules symmetrically distributed. They were pea- to hazel-nut size, of a reddish, slightly bluish color, hard and elastic like keloid. They were confluent in the cheeks, producing an uneven nodular infiltration; in the eyebrows, which were thinned, they were so located as to produce a leontiasis.

The patient was in the menopause, suffering from irregular men-



struation, hot flushings of the face, backache and headache. The eruption increased at each menstruation and the lesions became swollen. Involution had occurred in one node of the chest, leaving an atrophic. telangiectatic area.

The histopathology of the case was that of scleroderma. Most members of the society regarded it as a case of leprosy. Ormsby emphasized the absence of nasal and mouth lesions and the presence of a few nodules in the scalp. Several thought it was scleroderma or erythema nodosum perstans.

The case will be published later.

**Case of Lupus Erythematosus.** Presented by Dr. A. N. MACKAY.

Mrs. X., age about 45; husband living and in good health; children all living and healthy; no miscarriages; no previous skin trouble. Five years ago the patient sustained a traumatism of the nose, following which present trouble developed on the site of the injury. Six months later she consulted a surgeon, who excised section of diseased tissue and after histological examination, informed her that she had skin cancer, and recommended that she take X-ray treatments. Patient was then given two and three ray treatments each week, at the Presbyterian hospital, for a period of six months. She affirms that her condition grew steadily worse during these treatments, and that prior to this there was no involvement of cheeks, while by the time treatments were discontinued scarring on cheeks existed fully as conspicuous as at present. A patch on neck which developed during these treatments and was treated with rays has not improved, while a similar patch on opposite side healed spontaneously. The case showed well the unsatisfactory side of the X-ray treatment of lupus erythematosus.

**Case for Diagnosis.** Presented by Dr. HYDE.

The patient was a child 12 years of age, immature, with a good family history who have been under treatment for a year with a disease of the skin, supposed to be of the order of exfoliating dermatitis. The description given by her physician would seem to corroborate such suspicion; the appearance of the patient, however, was against that diagnosis. The upper portion of the body suggested one of the seborrhœic conditions with grayish discoloration of the surface, particularly over the axillary regions, sides of the nose, and elsewhere where there was marked pigmentation. The lower limbs presented the craquelé sometimes seen in xerosis. The elbows and knees were the seat of scaling and infiltrated disks, here and there exhibiting verrucoid filamentous projections as large as a section of a hen's egg. Some of these were infected, secreting a thin seropus. The same condition though less distinct could be recognized on the extensor faces of the joints of the fingers and toes. There had been a history of temperature variations running for the previous month between sub-normal to 102° F. The child had been taking Fowler's solution, eight

drops, three times a day, for a long time previous, and the general impression of those present was that the case was one of arsenical dermatitis.

**Case of Tuberculosis Verrucosa Cutis.** Presented by Dr. O. S. ORMSBY.

The patient was a little girl aged 5 years. Her father died three years ago with tuberculosis. There is nothing else of importance in the family history. The present disorder began two years ago in the site of a burn. The lesion has gradually grown from then until the present time.

When shown there was a dime-sized lesion on the dorsum of the right hand at the base of the third finger. It was moderately elevated, with a warty surface surrounded by a bluish-red halo. There were practically no subjective sensations.

**Case of Macular Atrophy of the Skin.** Presented by Dr. R. R. CAMPBELL

F. J., aged 43, Russian, married 17 years. Family history negative. At 21 he acquired a chancre; this was treated locally; later he received general treatment. Symptoms of syphilis were absent until three months ago, when an ulcer appeared near the site of the original lesion; this healed quickly under mixed treatment. His wife has had eight children, six of whom are dead; none of these showed any symptoms of syphilis. The present atrophy of the skin began five years ago as variously-sized red macules appearing first upon the thighs; these spots gradually enlarged and new ones have developed from time to time.

**Case of Syphilis.** Presented by Dr. F. E. SIMPSON.

The patient, 30 years old, gave no history of infection. Fifteen months ago while under treatment by a physician for a "cold," he had an eruption on the body of supposed medicinal origin. This faded in some weeks, but irregular outbreaks of a similar exanthem have occurred since then, the present one having been out six months. When shown there was an eruption sparsely distributed over the dorsums of the trunk and the extensor surfaces of the limbs, consisting of herpetiform groups of small dark-red papules, many of them excoriated by scratching; itching and other subjective sensations were denied. There were lesions within the mouth and upon the glands; adenopathy was present in the neck, groins, and one epitrochlea; the moustache showed thinning, and there was partial loss of hair on one eyebrow; the nails were very brittle.

The general resemblance of the eruption to dermatitis herpetiformis was commented upon; a ring of small papules on the glans suggested strongly the lesions of lichen planus. By general consensus the exanthem was believed to be a relapsing, acuminate papular syphilide.

**A Case of Lupus Tumidis.** Presented by Dr. O. S. ORMSBY.

The patient was a woman 55 years of age, and had suffered with the disorder for twenty-seven years. The lesion began on the right side of

the upper lip, and gradually spread for nineteen years. One and one-half years ago new nodules began developing on the nose. She states that the lip becomes more or less swollen from day to day. At present the entire upper lip is very much enlarged, more than double its normal size, is brownish-red in color, its surface presenting scaling, and on pressure, typical lupus nodules. It is firm in consistency, showing considerable connective tissue new growth. The nodules on the nose are the ordinary nodules of lupus vulgaris. The family history is negative as to tuberculosis.

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## NEW YORK ACADEMY OF MEDICINE

### Section on Dermatology

Stated Meeting held March 3, 1908

DR. A. R. ROBINSON in the Chair

**Morphoea.** Presented by DR. HOWARD FOX.

The patient is 41 years old, married, Swedish. She has had a moderate goitre as long as she can remember. A year and a half ago, while frying some fat, she burned the right side of her face. About a week later the lesions appeared, being confined to the right side of the face. The lesions gradually increased in size and prominence for a month, remained stationary for a year, and have recently become less prominent. Treatment with thyroid extract seemed to produce no improvement.

The case is interesting on account of a traumatism received a week before the eruption appeared and on account of the relationship to goitre. Although the coexistence of scleroderma and changes in the thyroid gland has often been noted. Schubiger has pointed out that in Switzerland, where goitre is very common, scleroderma is very rare.

**Pityriasis Maculata Recurrens.** Presented by DR. WALLHAUSER.

The case which I present for diagnosis came under observation January 2, 1906, or about two years ago, presenting an eruption that has not changed appreciably during this time. It consists of a mixed macular and papular eruption, inclined to superficial scaling. In distribution it is almost general, including the back, abdomen and extremities, with a predilection for the extensor surfaces. A few lesions have appeared in the palms of the hands. The face and scalp are not involved. The mixed character of the eruption is due to the age of the individual lesions. Several small purplish macular, slightly elevated oval or rounded lesions would appear on various parts of the body and progress to form macules or papules, in size varying from a lentil to a large bean, which remained stationary for several weeks and then gradually developed slight scaling, after which they retrogressed leaving superficial



scarlike lesions. The color changed with the stage of development of the lesion from a light to a dark purplish red, which gradually faded. The evolution of the lesion is very slow and may be put at from six months to a year, varying with the degree of development to the papulo-scaly type.

My first diagnosis was pityriasis rosea, with a question mark, on account of the strong resemblance to the maculo-papular eruption of syphilis. After observing the eruption for about three weeks, without its advancing as in pityriasis rosea, notwithstanding the fact that the patient denied all possibility of an infection, and which I had no reason to doubt, he was put on a specific treatment, which was continued for two months without any appreciable change in the eruption being noticed. On account of the slight scaling, which was becoming more evident, a diagnosis of psoriasis was thought of and the various antiseptics, including the treatment by chrysarobin, were applied without any effect. As the patient was becoming discouraged regarding the persistence of his condition, he was referred to Dr. H. G. Fox, who kindly returned him, with a letter in which he admits the resemblance to syphilis, and added that he would have made a diagnosis of syphilis without a history of the case. His diagnosis was pityriasis maculata recurrens, a form of pityriasis undescribed, of which he had had one other case. On Dr. Fox's advice the patient was put on a restricted diet. This was continued until the patient had lost considerable weight and otherwise showed the effects of depletion—as bodily fatigue, etc. His diet was then increased and a lotion of resorcin advised locally—and a combination of magnesium sulphate and magnesium carbonate was given to correct an existing constipation. Since beginning this plan of treatment a slight improvement is noticeable in that the eruption is less and the scaling papules seem to involute to the macular stage more rapidly.

In looking up the literature for a classification of this condition, we find a variety of cases of pityriasis of a persistent nature, consisting of various clinical manifestations, resembling according to different observers, many of the well established clinical entities of an erythematous, macular, papular or scaly type—as pityriasis rosea, lichen, psoriasis, eczema seborrhoeicum, etc. The resemblance to these various conditions has given rise to names synonymous with the condition of resemblance, with an added qualifying prefix, as the parapsoriasis of Brocq, parakeratosis of Unna and Pollitzer, lichenoid eruption of Neisser, erythrodermie pityriasique en plaques disséminées of Brocq, etc. On account of the variety of clinical description a classification has been attempted. That of Brocq has been quite generally accepted on account of convenience from a clinical standpoint of division into classes according to the morphology. His division, briefly, consists of three classes, as follows:

1. Parapsoriasis guttata, in which the eruption resembles an early psoriasis.



2. Parapsoriasis lichenoides, in which the elementary lesions consist of flattened papules developing retiform patches by coalescence.

3. Cases occurring as sharply defined coin-sized patches of pityriasis, resembling the erythematous stage of mycosis fungoides, or eczema seborrhoicum. Under this head he includes his erythrodermie pityriasique en plaques disseminées.

If we accept this classification we can place the case under discussion in class one, or parapsoriasis guttata. But the difference in clinical course in the cases classified is so different that it is more than likely that several distinct diseases have been included. There is certainly no resemblance in this case to the one shown by Dr. Trimble, October 29, 1907, which was accepted as a case of Brocq's pityriasis in patches, except the persistent character of the eruption, which may be considered as recurring in this case rather than persistent.

In a previous case resembling the erythematous stage of mycosis fungoides the eruption was well developed when the patient came under observation and in consequence an opportunity of observing its development was not afforded, yet it did not change in several months by the development of new lesions at intervals of a few days as in this case.

I am, therefore, inclined to accept the diagnosis of Dr. Fox—of pityriasis maculata recurrens, as this name best describes the condition in question and should be maintained as a clinical entity until a closer relationship can be established between the various forms of persistent pityriasis than a resemblance pathologically.

#### DISCUSSION:

DR. TRIMBLE said that he considered this to be a case of parapsoriasis of Brocq. It was, in his opinion, identical with a case he had shown before the section, with perhaps a difference in degree. He considered his case to belong to the third variety of parapsoriasis, that is, erythrodermie pityriasique en plaques disseminées, and he thought probably the case under discussion might be assigned to the first variety, that is, parapsoriasis guttata.

DR. LAPOWSKI said that he considered this to be a typical case of psoriasis, with a seborrhoical element added. He objected to the term "parapsoriasis" because it was impossible, from Brocq's description, to form a clear idea of what he meant by it.

**Syphilis of the Breast** (same as Case 1, Feb. 4, 1908). Presented by

DR. LAPOWSKI.

Some gentlemen in discussing this case last month expressed a doubt as to the diagnosis of Paget's Disease, suggesting instead of gummata syphilitica. I have given the patient antisymphilitic treatment for the past month, and the result bears out the correctness of the views of these gentlemen. The patient received one injection of calomel and one of salicylate of mercury, inunctions of 20.0 g. Ung. Hydrarg. Dil. U. S. P., and 60 g. of Potassium iodide. The deep ulcerations to the left of the nipple are nearly levelled, the flat, round superficial ulcer is quite well. I forced the treatment, in order to be able to present the case at this meeting.

**Large Gumma of the Breast.** Presented by DR. LAPOWSKI.

The patient is a woman aged 56 years, married 40 years. Her present history is negative. Four out of twelve children died at various ages between 2 and 8 years, of "summer complaint" and diphtheria. The oldest child is 34 years old and the youngest is 16 years old.

Six out of the eight living children suffer with nail diseases, and one of the sons has chronic aphthous ulceration of the mucous membrane of the mouth in connection with his nail trouble.

Four years ago the patient came to the Good Samaritan Dispensary with swollen, hard, movable, smooth, painless glands in both occipital, both auricular, the submaxillary, both axillary (especially the left), left clavicular, and left cubital regions.

In each breast, especially in the left, a hard, movable, painless, sharply defined mass was felt, starting from the nipple, reaching up to the upper third of the breast. The mass was smooth, the skin movable, of normal color, or near the nipples adherent to the mass and slightly red. The glands and breasts had begun to swell several months previously while she was on the sea, and she suffered from chills and fever at the same time. The nail of left index finger was changed in color. It was dark, spotted at the distal end, the surface smooth, and not brittle. There were no other manifestations on the skin or mucous membranes, or in the internal organs. The urine was normal. The patient looked well, and did not complain of any pains. No blood examination was made. The patient was advised in other hospitals to have her breasts removed.

Under antisyphilitic treatment consisting of two calomel injections and potassium iodide all the glands disappeared in 5 weeks, and the hard masses in the breast greatly diminished, leaving only slight hardness near the nipples.

The patient was discharged.

After being well for three years she returned 3 weeks ago in the following condition:

*Right breast* a hard, painless, sharply defined, movable smooth mass of the size of a large orange, starting from the nipple and reaching up to the upper end of the breast can be felt under the skin. Alongside the nipple, and running upward, the skin is adherent to the mass, having a vivid red, angry color, disappearing under pressure, but quickly reappearing. The rest of the skin is normal in color and movable. There are no glands in the right axilla. z

*Left breast:* A smaller hard mass of the same character, but covered with normal skin which is not adherent. There are no glands in the left axilla. Other glands are not perceptible. There are no other manifestations.

On account of my former experience with the patient I have to accept her case as of syphilitic nature—and present her as such.

## DISCUSSION:

Dr. POLLITZER said that he believed this to be a carcinoma and not a gumma, basing his diagnosis chiefly on the appearance of the skin at one point where the epidermis was broken through by growth from below. Under similar conditions a gumma would have broken down and left an ulcer. He advised three or four weeks of antisyphilitic treatment, and then, unless great improvement had taken place, amputation.

Dr. CLARK said that he agreed with the diagnosis, and excluded carcinoma on account of the slight glandular involvement, the lack of ulceration, and the non-attachment to the chest, being of so long duration and so large. He advised biopsy to establish the diagnosis.

Dr. KLOTZ said that he believed this to be a gumma on account of its consistency, and the previous occurrence as well as absence of enlarged glands and of pain. He would give mercury energetically, but not rely on potassium iodide.

Dr. ROBINSON believed that the hardness, irregularity of contour, the infiltration into the cutaneous tissue in the direction of the nipple and the peculiar color and drawing in of the surface towards the growths beneath, pointed to carcinoma as more probable than gumma. The absence of enlarged axillary glands was not against carcinoma. He would advise large doses of iodide of potassium before advising an operation, as the diagnosis of gumma by Dr. Lapowski may be correct.

Dr. LAPOWSKI, closing the discussion, said that he did not consider the appearance of the skin over the tumor at all characteristic of carcinoma, and that with the previous history of a similar condition in the breasts which had disappeared under active mercurial treatment, he considered this mass was decidedly syphilitic.

**Lupus Disseminatis.** Presented by Dr. LAPOWSKI.

The patient is a woman 30 years old, married, with two healthy children. There is no family history of tuberculosis and no history of syphilis.

Five years ago she came to the Good Samaritan Dispensary with patches of papulo-tubercular lesions on the left knee, the right arm, the trunk below the scapula and on the chin. In the sputum at that time tubercle bacilli were found. Various local measures—plasters, high frequency electricity and X-ray were tried without any effect—the lesions would flatten but never disappear. After a short time they would attain their usual size: that of a pea. The best results, comparatively, were obtained from calomel injections—but even under that treatment, the lesions did not disappear. All treatment was stopped and the patient was advised to take the best possible care of her general health. The lesions on the back are less prominent, but on the chin, arm, and knee, remain stationary for the last two years.

**Tuberculide.** Presented by Dr. CLARK.

The patient is a woman 20 years old, Irish, single. There has never been any tuberculosis in her family; they have been healthy, strong people. She has always been well, never had any illness except typhoid seven years ago. Occasionally she has had colds which were easily thrown off.

When getting well from typhoid, she noticed little pimples behind



the ears which would grow slowly, break and leave scars. A little later she noticed a few on the extensor surfaces of the forearms and below the knees. These pimples would slowly disappear, leaving little white spots, and others would come out and go through the same course. These pimples kept coming and going until the patient came to this country two years later, and almost entirely disappeared for one year except for an occasional one behind the ear. Four years ago the pimples began to come again on the arms and legs and she has had them off and on ever since—better and worse at times and tending to come in small crops. They necrose at the center and leave a punched out scar behind. These lesions the patient now shows in all their typical stages on the arms and legs. On the forehead she has three marble sized masses, quite hard and a little tender, movable in the deeper parts, and situated beneath the skin, though the skin is a little inflamed over one swelling. These lumps are of two weeks' duration and are now quite rapidly disappearing with the treatment. She had similar masses on her forehead one year ago, lasting two months. Behind the ears the skin seems shiny and stretched, and scattered in this are several small inflamed papules, a few of which are necrosed at the center, and several faint white scars. The patient shows a very decided response to the ophthalmo-tuberculin test—2 drops of a half per cent solution having been instilled in the eye 24 hours ago.

**Case for Diagnosis.** Presented by DR. JANEWAY for DR. BULKLEY.

The patient is a man 33 years old. He has always previously been in good health. He has never had any trauma or operative procedure. His occupation is that of a turner, and he thus stands all day at a lathe. Twelve years ago he had gonorrhœa. He denies syphilis. His present trouble began three years ago, with an attack similar to the present, in the left leg, so that the following description of the present trouble will represent all former conditions. In all, during the past three years, he has had five such attacks, sometimes in one leg and sometimes in the other; once in both legs together. Their usual duration is four months. The present trouble began two months ago, and has gradually increased till the present condition has resulted. He now has upon the anterior and internal surface of the left leg below the knee a doughy, slightly swollen, and congested red area about six inches long and three inches wide, which pits distinctly on pressure. It is not tender, and the only abnormal sensation is itching. There is no pain in walking. The temperature is not elevated.

#### DISCUSSION:

Dr. ROBINSON had seen similar cases of deep inflammation which frequently recurred. He regarded the case as one of deep infection, the result of an exogenous toxæmia, the endothelial cells of the part being vulnerable to the toxine.

Dr. POLLITZER said that the condition was very suggestive of erythema induratum and he would like to know the result of a tuberculin test.



**For Diagnosis: Tuberculide or Syphilis?** Presented by Dr. LAPOWSKI.

The patient is a man twenty-five years old, married three years ago. No children. His family history is normal. When four years old the patient was vaccinated, the sore running a normal course. When eight years old a white speck, surrounded by a red border, appeared on the left eyeball. It was treated by Dr. Claiborne in the Vanderbilt Clinic, where the diagnosis was keratitis marginata—as seen from the dispensary card—which the patient had kept and brought to me. He was given a yellow ointment locally and eye drops, but no internal medicine. Two weeks later “running sores” appeared over the whole body lasting several months. The patient went to Mount Sinai Hospital Dispensary, where the eruption was seen by Drs. Lustgarten and George Fox. The patient could not tell what diagnosis was made at that time, but the eruption must have been a very peculiar one, as he was directed to go to the office of one of the physicians to be photographed. He did not go. Privately he was treated with mercurial inunction and potassium iodide. The eruption disappeared, leaving scars visible as present on the sacral regions. The eruption reappeared every winter for the next seven years, especially attacking the lower extremities, leaving very marked dark brownish scars, which persist. Under mercury and potassium iodide the eruption usually disappears. When fifteen years old, there was a relapse on the left eye consisting of a white speck, surrounded by a red border. He was treated in the Vanderbilt Clinic by Dr. Holden, with mercurial inunctions and potassium iodide, and drops locally. After four weeks’ treatment he was cured. Several weeks later, ulcerations appeared on both legs. He came to the out-door Department of the Skin and Cancer Hospital, where I saw him for the first time, ten years ago. I distinctly remember that neither Dr. Bulkley, who saw the patient, nor myself, could accept the lesions on the legs as syphilitic and the patient received one-fourth grain tablets of calcium sulphide, which he took to the amount of about 100 grains.

The eruptions on the legs disappeared, leaving scars, and since then the patient has not had any lesions on the lower extremities—which, by the way, goes to prove—that we cannot always judge *ex juvantibus*. When nineteen years old he had a superficial lesion on the glans penis lasting a month and a half and disappearing under local treatment.

When twenty-three years old he had an ulceration on the glans penis which disappeared under antisyphilitic treatment, leaving very deep disfiguring scars, which traverse the glans in various directions. Two months ago the left eye began to trouble him. Dr. Tynson (Vanderbilt Clinic) gave him mixed treatment. Several days ago he came to the Good Samaritan Dispensary and the following condition was found. He was well nourished, healthy looking. His face and whole body, especially the sacral and gluteal regions, were covered with scattered, deep, white pitted scars. There was no pigmentation around any of the scars above the

knees. Only the lower two thirds of the legs were covered with dark brownish, deep, smooth, cigarette-paper like scars, not so markedly pitted. The edges of the scars are darker than the centres. The palms, soles, nails, and mucous membranes are normal. No glands enlarged.

*Left eye* (examined by Dr. Percy Freidenburg): Complete abducens paralysis, and keratitis interstitialis.

#### DISCUSSION.

Dr. KLOTZ said that the scars on the legs were not sufficiently characteristic to make a diagnosis. On the glans penis, on account of the peculiar character of the tissue, any deep lesion might leave such scars.

Dr. LAPOWSKI, closing the discussion, said that the symptoms in the eye were characteristic of syphilis, while the lesions on the trunk and the extremities would be considered characteristic of a tuberculide, by anyone ignorant of their history. He would report later the result of intense treatment.

#### Intermittent Limping (Claudication Intermittent, Charcot). Presented by Dr. LAPOWSKI.

The patient is a man forty-six years of age, married, a Russian of Jewish descent. Denies syphilis. Has had three attacks of gonorrhœa, the first when twenty years old, the last five years ago. There were no gonorrhœal complications. He does not drink, but smokes heavily—thirty cigarettes daily. The present affection commenced gradually about two years ago, with pain in the foot on walking. He complained of cramp-like pains and pressure in the calf of the right leg, which always attacks him after he has walked two or three minutes and obliges him to rest a few minutes before going on. No pulsation can be felt in the right dorsalis pedis artery nor in the tibialis postica, though both these arteries can be felt beating in the left limb. The pulsation of the femoral artery is normal in both groins. Both dorsal and solar surfaces of the right foot from above the malleolus down to the tips of the toes are changed in color. The outer and inner edges are pale, the distal ends of toes are of death-pale color, the toes and surrounding surface cyanotic and the rest of the dorsal aspect congested, the redness disappearing under pressure, but not entirely, firm, hard hæmorrhagic scars being left. On the red surface of the dorsum, whitish islets are scattered. When the patient is examined in a horizontal position, the redness near the toes disappears, becoming paler. If examined right after walking, a paleness can be noticed in the spots which are congested during rest. There is no anæsthesia. There is no evidence of any disease elsewhere in the body. The radial arterics feel normal. The pulse is about 90, of moderate volume and of fair pressure. The knee and plantar reflexes on both sides are normal. The pupils are equal and react normally to light.

Urine: Spec. gr. 1022,  $\frac{1}{20}\%$  of albumen, many mucous and hyaline casts, and some squamous epithelia.

The patient at present suffers from two distinct kinds of pain: (1).

The cramp-like muscular pains of intermittent claudication (*angina cruris*) as already mentioned, and (2), a local pain in the toes, which has sometimes kept him awake at night, but now under treatment has disappeared. He has flat feet.

The case is a typical one of obliterative arteritis, which often leads to gangrene of the extremities and occurs in men in the prime of life, especially in Jews from Poland, and Russians, who have been accustomed to smoke cigarettes rather freely.

The cases reported in literature are nearly 90% of Polish and Russian Jews. Syphilis apparently plays no part in the etiology. The really essential cause of the arterial disease in these cases, however, remains unknown.

The interest of the present case lies chiefly in the remarkable intermittent spastic contraction of the minute cutaneous blood vessels of the foot which precedes the muscular cramp-like pains. The congested condition of the foot in the present case may be explained as an automatic attempt to compensate for the arterial obstruction by dilatation of capillaries and venules—that is an automatic attempt to favor collateral circulation, and as long as collateral circulation is present amputation is to be postponed. Moszkowicz's method was tried on our patient to determine the condition of collateral circulation. For the healthy limb the circulation returned in a few minutes, but in the affected foot it took about twenty minutes before the redness returned, proving that the deep arterial vessels are still open for the circulating blood and sustain in a small degree the life of the tissue elements.

#### DISCUSSION.

Dr. KLOTZ said that Durandard in a Paris thesis of 1902, from the clinic of Dieulafoy, represents intermittent limping as a symptom of a specific obliterating endarteritis of the large arteries of the extremities, leading to interference with the circulation, particularly under the influence of muscular action during an attempt to walk, and that energetic antisyphilitic treatment should lead to improvement. Dieulafoy insists on injections of the biniodide of mercury. If the symptoms were due to spasm of the muscular coats of the arteries, why should this spasm occur in one leg and not in the other, and only when that member is set in motion?

Dr. DANA HUBBARD said that he had seen a similar case in a delicate country-bred girl whose diet was largely cereal. She had intermittent attacks of coldness and numbness of the feet, generally thought to be due to an obscure hereditary syphilis. She improved greatly on a change of diet, omitting all cereals, but relapsed when cereals were added again. She was finally cured by proper regulation of the diet. It seemed quite possible that her symptoms had been due to the toxic action of some poison contained in the cereals, produced by a fungus occurring in the grain, and akin to the ergot of rye.

Dr. LAPOWSKI, closing the discussion, said that the fact that the affection was unilateral did not prove that it was syphilitic, because there was no reason why other poisons besides the syphilitic might not confine their action to one foot. While a syphilitic obliterating endarteritis produces a somewhat similar clinical picture, yet in this case the intermittent spasm of the arterioles is the char-



acteristic feature. He was avoiding all local irritation very carefully and was relying upon local galvanic baths and large doses of potassium iodide and antipyrine in the treatment.

**Psoriasis of the Palms and Soles.** Presented by Dr. ROBINSON.

The patient is a man fifty-four years of age, occupation, bricklayer. He gives no history of syphilis. He has had psoriasis since twenty-five years of age, and I have had him under my observation more than ten years, having treated him for several attacks of the disease. He states that the eruption has always appeared upon the palms and soles, when it appeared upon the body in general. The present eruption does not differ in character from previous attacks as I have seen them. He has a well-marked psoriasis of all parts of the body, scalp, face, chest, body and extremities. Both palms and soles are covered with lesions, so that in some places it looks like a general keratosis of the part. On the fingers the lesions are more isolated, and vary in size from a large pin head to a pea, sharply limited, with a tendency to clearing in the center, much as in syphilis. The nails are also affected.

The case is shown on account of the comparative rarity of psoriasis of the palms and soles, and the fact that these parts have been in this case so frequently involved in the general eruption.

**Psoriasis in a Syphilitic Subject, with the Lesions Much Resembling a Syphilide.** Presented by Dr. ROBINSON.

The patient is a man twenty-eight years of age, occupation, undertaker. His general condition is not vigorous. He had a chancre five years ago, seated near the root of the penis. He was treated by me at the time and since, with mercurials and very little iodides. He never had many cutaneous lesions, but sores in the buccal cavity were frequent and obstinate to treatment. The present eruption commenced two months ago and consists of several hundreds of lesions, small to large pea-sized, situated especially upon the posterior surface of the trunk, although they are also plentiful upon the arms, legs, front of the trunk and upon the scalp. The palms are free, also the buccal cavity. The lesions are decidedly grouped and they show no signs of increase in size by growth at the periphery as usually occurs in psoriasis vulgaris. A single lesion is sharply limited, elevated, light red with a tinge of yellow and more or less scaly on the surface. On the forearms the scales are of the classical white appearance. On account of the grouping, the great uniformity of size, the color and the slight scaling in many of them the diagnosis between psoriasis and syphilis was a question, and I believe the previous syphilis gave a type to the eruptions in this case. This was the first attack of psoriasis.

DISCUSSION.

Dr. LAPOWSKI said that he had seen a similar case with an apparently typical psoriasis of the skin, in a patient with a history of syphilis who had also typical



mucous patches in the mouth and at the anus. In all such cases where the diagnosis is doubtful he advised intramuscular injections of calomel, and no other treatment, not even bathing. In a week or ten days the syphilitic lesions will undergo a very remarkable change while the psoriatic efflorescence will show the white scales more prominently than before the administration of calomel.

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### THE PHILADELPHIA DERMATOLOGICAL SOCIETY.

The regular monthly meeting of the Philadelphia Dermatological Society was held at the Polyclinic Hospital, on Tuesday evening, April 21, 1908, at 8:30 o'clock. Dr. M. B. Hartzell, presiding.

Dr. Hartzell showed an excellent photograph, taken by the Lumiere method, of a case of Raynaud's disease. The picture presented an exact reproduction of the dilated blood-vessels of the left foot, the bluish-red appearance of the skin, and the yellowish-brown pigmentation of the toenails.

#### **Bromide Eruption in an Infant, An Extensive Case of.** Presented by Dr. QUINLIVAN.

The case exhibited was an infant, seven months of age, fat, and excepting the skin lesions, healthy in appearance. The first outbreak occurred four months ago, at which time a few "pimples" appeared upon the face; these increased in number, and became almost generalized. At the present large confluent patches are seen on the face, scalp, ankles, legs, forearms, wrists, upper arms, buttocks, and a few on the trunk. The lesions on the face and scalp are palm in size, elevated, reddish-yellow in color, with a papillomatous, "cauliflower-like," surface. Those on the wrists and ankles are silver-dollar in size, raised from one-eighth to one-quarter of an inch, sharply marginate, with a flat surface, on which is seen numerous miliary abscess openings. The large papillomatous lesions are made up of grouped pustules, from which can be squeezed a cheesy material. Two weeks before the eruption appeared the baby was given strontium bromide; this drug was only administered for two weeks. The marked resemblance of some of the lesions to those found in blastomycosis, and in mycosis fungoides was remarked.

#### **Chromidrosis, A Case of.** Exhibited by Dr. DAVIS.

The patient was a male twenty-one years of age and born in France. Two years ago upon removing his undershirt, he noticed a faint discoloration on that portion, in contact with the axillæ. He had for years perspired considerably, but until that time he had never noticed any color to the sweat. The sweating has progressively increased, until now even in cold weather the shirt in contact with the axillæ is wet after a few minutes

wear. On examining the undershirt the part that had been in contact with the axillæ was found to be stained a deep brownish-red. The other parts of the body are not affected by this anomaly. The hairs in the axillæ apparently do not contain the small nodes which are frequently found in this condition. Dr. Hartzell mentioned various cases of this disorder that he had seen, and referred to one, in which the "red-sweat" was exuded in the perineal region. The patient also showed marked dermatographism, but no "wheals."

**Pigmented Naevi, A Probable Case of Multiple.** Presented by Dr. SCHAMBERG.

A well-formed girl twelve years of age was exhibited, with thirty or forty lesions on the trunk, which had lasted since birth. The chest, abdomen, upper arms, but chiefly the back, were involved. The lesions were sharply marginate, wart-like in appearance, but superficial and smooth on pressure, reddish-brown in color, and from split-pea to dime in size. The follicles of the skin could be plainly seen in these patches, giving a stippled appearance. There were no hairs in any of the lesions. The girl was also recovering from a recent herpes zoster, on the left side of the neck and shoulder.

**Epithelioma of Face.** Presented by Dr. PFAHLER.

The patient was a woman fifty-two years of age. The present lesion started as a small ulceration, upon the right side of the forehead, five years ago. This lesion increased in size, until at present there is a silver-dollar-sized lesion adjoining the right eye, which is very superficial, with a raised, serpiginous border, and practically no ulceration. This patient had received fifteen X-ray exposures during the last five months, with some improvement. The resistance of superficial epithelioma to treatment was discussed.

**Xeroderma Pigmentosum, A Case of.** Presented by Dr. STOUT.

The patient was a well-built boy of two and one-half years. The parents noticed nothing unusual about the boy, until at the age of one year numerous freckles appeared upon the face. These freckle-like lesions have continued to appear on the face and also on the scalp. The boy seems to be irritable and to have some photophobia. At the present time there are hundreds of lentiginous lesions on the face and scalp. The cheeks and nose showing the greatest number. The lesions are from light-brown to jet-black in color, mostly round, but some are irregular in shape, practically all are smooth, and from small pin-head to split-pea in size. Small telangiectases are found on the cheeks, between, and in close prox-

imity to the pigmented lesions. The scalp in addition to the freckle-like lesions is somewhat scaly and rough. The skin of the face is also rough and scaly. Pigmented areas are also found on the mucous membranes of the lips. On the forehead two irregularly-shaped, jet-black pigmented lesions are found, resembling markedly the early stage of a melanotic sarcoma. The trunk is free, the face and the scalp being the only areas involved. There are two other children in the family who, according to the father, have skin without freckles. The interesting fact was however discovered, that probably another child in this family had the same disease. The father stated distinctly that this other child had a large number of "freckles" on the face. This latter child died from an undiscovered cause. The father has had psoriasis for some years. This case was presented through the courtesy of Dr. Stelwagon.

**Pigmented Naevus Treated by Freezing.** Exhibited by Dr. SCHAMBERG.

The patient treated was a male, twenty years of age. The lesion consisted originally of a small-fist sized lesion, brownish in color, sharply marginate, and covered with hairs. The site of the naevus was the left side of the forehead, between the eye and the hairy border. The patch was frozen with carbon dioxide, light pressure being used for nine seconds. A razor-bag was first held over the cylinder attachment, and compressed until it became solid, this frozen stick was then cut and applied to the naevus. Much improvement has resulted from the one application; the pigment being lessened and the hairs removed.

**Lichen Planus, A Case of.** Exhibited by Dr. STOUT.

The patient was a negress thirty-eight years of age. Five months ago she first noticed the appearance of "bumps" on the wrists. These lesions have increased in size and number; until at present there are about fifty, large pin-head-sized, flat, shiny, blackish, umbilicated, slightly scaly, irregularly shaped papules. These lesions are on the flexure and extensor surfaces of the wrists and hands, and also on the ankles. The mucous membranes of the mouth are not attacked. There is intense pruritis. The interesting fact was discussed as to the resemblance and difference between lichen planus in the negro and the white races. It was also mentioned, how prone it is for almost any inflammatory disease of the skin to produce increased pigmentation in the negro.

**Sarcoma Treated by the Roentgen Rays, A Case of.** Presented by Dr. PFAHLER.

The patient was a male thirty-six years of age and apparently in the best of health. Some months ago the left testicle was removed because of a tumor. This growth upon microscopic examination proved to be a



round-celled sarcoma. Some six months ago the patient developed a hydrocele, which was operated upon. The wound from this incision persisted in remaining open, and two nodules were palpated in the left groin. Five months ago exposures to the X-rays was started. The patient was exhibited to show how nicely the wound has now healed. The nodules have also disappeared in the groin under this method of treatment. The interesting fact is noted that the pubic hairs on the left side have disappeared, because of exposure to the Roentgen rays.

**Epithelioma, A Probable Case of.** Exhibited by Dr. PFAHLER.

The patient was a male, fifty-one years old. It had been rather hard to arrive at a diagnosis in this case, as the patient originally had presented himself after treatment by "quacks." The original condition consisted apparently of two ulcerated lesions on the left side of the neck. The condition, however, has been very much improved by X-ray therapy. The patient is tuberculous, the tubercle bacilli having been found in the sputum. There are also tubercular ulcerations of the larynx.

Dr. Pfahler also presented a microscopic slide, that showed a papillomatous growth, from the finger of a roentgenologist, that had been caused by the frequent use of the X-rays.

Dr. Schamberg exhibited a case with the diagnosis of ACNITIS. The patient was a male of twenty-nine years, and had had the condition for nine weeks. The lesions, with the exception of two on the penis, were localized to the face. This case is to be reported in detail at a later date.

**A Case for Diagnosis.** Presented by Dr. DAVIS.

The patient a male of thirty years, had originally been seen by Dr. Davis, in Dr. Harte's surgical ward at the Pennsylvania Hospital. Unfortunately very little history could be obtained as the man was a Greek, and could not talk English. The patient was admitted to the hospital five weeks ago, with a fist-sized bubo in the right axillæ, this swelling was hard and inflammatory. Under the nail of the middle finger of the right hand, was found a slightly inflammatory, papillomatous growth. On this same arm and hand, at various intervals, were found about a dozen pea to walnut-sized tumors, of the "cold abscess" type. These tumors were compressible, reddish-brown in color, elevated, circumscribed, not painful on palpation, and gave the sensation of being "hollow." The lymphatic cords could be felt, the thickness of thick twine, extending from the elbow to the axilla. These tumors seemed to be connected with the lymphatic system, as they were in direct contact with the thickened lymphatic cord. Cultures and smears were made from the fluid from the growths, but with the exception of a few staphylococci the findings were negative. Tubercle bacilli and blastomyces were absent. There has been no eruption on the body or adenopathies. Dr. Schamberg suggested the possibility of blastomycosis with subcutaneous abscess formation. Unfor-



tunately the diagnosis remains somewhat in doubt. It should be mentioned that there was only a slight elevation of temperature, thus apparently excluding bubonic plague.

Dr. Schamberg showed two specimens of pediculi, the one equine, and the other bovine. The pediculus obtained from the cow resembled markedly the species that attacks man. The interesting fact was developed that the woman who owned the cow from which the pediculus was obtained, suffered from intense pruritis at night. Those present discussed the possibility of the pediculi from the cow, being the source of the nocturnal pruritis of the woman. The pediculus obtained from the horse was of an entirely different type, the head being long, and turtle-like.

FRANK CROZER KNOWLES, M. D., *Reporter.*

# REVIEW of DERMATOLOGY AND SYPHILIS

Under the charge of A. D. MEWBORN, M. D.

## BULLOUS DISEASES.

By JOHN T. BOWEN, M. D., Boston.

**Epidermolysis Bullosa Hereditaria, and Its Relation to Raynaud's Disease.** LINSER. (*Archiv. für Derm. und Syph.*, lxxxiv, p. 369.)

Linsér records several observations which point to a connection between epidermolysis bullosa hereditaria and vaso-motor neuroses, especially Raynaud's disease.

1. The Maier Family. In this family a three-months old child had been affected with typical epidermolysis bullosa since its birth; and in the same village there were two sisters who were similarly affected, remote cousins of the infant. The mother of the two sisters, who was a woman of seventy-four, complained of stiffness in the fingers and severe pain whenever she put her hands in water. The father of the infant had a certain form of ichthyosis, and was quite susceptible to the cold. A brother of the infant had been affected in the same way and died when six months old. The bullæ were produced by the slightest pressure or rubbing, and attained in a short time quite a large size. A very considerable hyperidrosis was noticed in the child. Examination of the blood showed a considerable lymphocytosis.

The two sisters, who were respectively forty-four and twenty-nine years old, had also been affected with a typical case of this disease since their birth. In the case of one sister, in certain instances scars were left after the lesions. During the menstrual period, the tendency to the formation of bullæ was diminished. The patient had a rheumatic polyarthrititis, and during this time the bullæ did not appear. With regard to the second sister, it was similarly noted that when she was affected with an inflammation of the lungs, the bullæ ceased to appear. This patient suffered from attacks of headache, and pain and numbness in the fingers, and was troubled with hyperidrosis. There was also a diminution in the bullous formation during the menses.

2. Family Sch. These were two boys, brothers, aged respectively fourteen and twelve, in whose family there was a great sensitiveness to cold. Two older brothers died of the same disease when six and eight years of age. The skin of the two boys presented a remarkable reddish-blue color in even moderately cold weather; and before the appearance of bullæ the fingers were often dark blue and very painful. Three years previously the younger of the two had lost half of the forefinger of the right hand, without having been specially injured.

There was a complete absence of nails of both hands and feet. The skin of the fingers and backs of the hands was atrophic, thin, and bluish-red in color, especially in the case of the younger child. There were pigment spots and small superficial scars of the lower arms, especially about the elbows; and there was atrophy, also, of the back of the feet. It is to be remarked that in the case of these two brothers, the cause of the formation of bullæ consisted not solely in mechanical influences, but especially in those of temperature.

From histological examinations, the writer thinks it probable that in the formation of bullæ there is a damage of a particular part of the epithelium, perhaps a necrosis of a small area of cells, which has an inflammatory action on the adjacent parts, and this causes exudation and the formation of bullæ. The position of the bulla is in the lowest layer of the rete Malpighii. This necrosis of the epithelium, he considers, in these cases, is produced by a vaso-motor neurosis. This, he thinks, is proved by the reddish and white appearance of the fingers in the presence of very slight changes in temperature; by the fact that in one case the mother had Raynaud's disease; that the finger of one of the patients had been lost by gangrene; by the diminution in the bullæ formation during the menstrual period in two of the patients and its complete cessation during acute infection, and by the headaches and hyperidrosis. To these reasons may be added the falling out of the nails in two cases, and the atrophy and scarring. The fact that in two of the cases no hereditary element could be detected does not, in the writer's opinion, warrant the separation of the cases into two affections.

#### Polymorphous Dermatitis and Pemphigus Vegetans. CONSTANTIN. (*Ann. de Derm. et Syph.* November, 1907.)

Pemphigus vegetans, as described by Neumann in 1886, is an affection characterized by an eruption of bullæ leaving vegetating surfaces, with a quite constant localization and a fatal course. To this serious typical form a less common benign form has been added which presents, in the end, about the same features.

As to the nature of pemphigus vegetans, and its exact place in classification, opinions are divided. Brocq declares that there are two opinions, one of which asserts that it is a simple tendency of the patient to produce vegetations under all sorts of influences, the other that it is a specific bullous dermatitis. The former regard the vegetation as simply a mode of reaction of the skin under the influence of various causes; the others hold the pemphigus to be a specific disease. Each of these two theories is tenable, for pemphigus vegetans, in its typical form, has altogether the features of a specific disease, and it is none the less true that not a single one of all its symptoms belongs to it exclusively. As for the benign form of pemphigus vegetans, it has oftentimes so close a resemblance to certain polymorphous dermatitises

(dermatitis herpetiformis) of bullous and vegetating type that its existence may be doubted.

After reviewing the case published by Fordyce and Gottheil, which the writer believes accords with the *pyodermite végétante* of Hallopeau, although it has many points of resemblance with dermatitis herpetiformis and pemphigus vegetans, he refers to the case of Ferrand, which, on account of its mode of onset, evolution, and appearance of the lesions, he considers should be classed as benign pemphigus vegetans.

Constantin then reports at some length his own observation, which concerned a man of fifty-eight, of previously good health, who had first complained of intermittent pruritus, localized at first in the back, soon spreading to the whole body, but especially marked on the arms. Soon after, bullæ began to appear on the arms, and later on the legs, which were clear or slightly turbid, and left a denuded and very red surface.

These different symptoms continued for almost a month without any change in the functions or in general condition. On account of the pain from ulcerations, the patient was unable to work, and for that reason was admitted to the hospital.

The mouth had been affected from the start, where there were large patches of eroded mucous membrane separated by white patches.

With the exception of the plantar and palmar regions, almost all the surface of the body, including the face, was affected in different degrees. In the flexures, the different elements were rather more grouped and confluent, and consisted of very numerous vesicles and bullæ and papillomatous elevations of a pale red color, and exuding without being positively ulcerated. These vegetations were especially pruritic, but not very painful, and seemed to have followed vesicular bullous efflorescence, although this transformation could not be directly observed.

The writer thinks that he is dealing with a bullous and vegetating form of dermatitis herpetiformis. Under soothing treatment the affection rapidly improved, and after three weeks had almost entirely cleared up. The following month the patient experienced three successive attacks, which were preceded and accompanied by severe itching and the appearance of small vesicles. He was also affected from time to time with œdema in various parts of the body. Examination of the urine showed a marked diminution in the urinary sulphur, and the presence of indican. There was a slight leucocytosis.

The writer thinks that he is dealing with a bullous and vegetating form of dermatitis herpetiformis. The implication of the mucous membrane of the mouth and nose, the localization of the vegetating lesions in the flexures, and the slight density of the painful symptoms, would make one lean toward pemphigus vegetans.

With regard to the differential diagnosis, it is emphasized that the



multiformity may not be present at all times in dermatitis herpetiformis, and that the subjective signs of burning and itching may not appear until late in the course of the disease. (It is the reporter's belief that these symptoms have been much exaggerated in differential diagnosis.) The localization of the lesions of dermatitis herpetiformis may be similar to that of pemphigus vegetans, and it may, like the latter, affect the mucous membranes. As to the vegetation, it should be considered as a complication rather than as an essential feature, for a number of forms of bullous and pustular dermatitis may become vegetating. Unfortunately, the histology and the examination of the various secretions throws no light, and eosinophilia can no longer be depended upon as a means of differential diagnosis between different cutaneous affections.

The case of Winfield, reported in this Journal, Vol. 25, page 17, is cited as presenting good evidence of the specific infectious nature of this disease. It concerned a young girl of eighteen with an eruption strictly limited to the typical points of election, and at the autopsy severe lesions of all the internal organs were found.

**Benign Pemphigus Vegetans.** FERRAND. (*Ann. de Der. et Syph.* April, 1907.)

Ferrand describes a case occurring in the service of M. Darier in the Hôpital Broca, which is interesting as proving the existence of a form of pemphigus vegetans with a short and benign course. The patient was a young woman of twenty-two, with no important hereditary history. When she entered the hospital the affection had lasted about three months. It began by intense itching over the whole body, which was followed by bullæ on the legs. This condition lasted several weeks, and the affection extended to the scalp. When she was admitted, she had numerous crusts on the legs, of a fetid character, as well as upon the shoulders and upper limbs. There were very marked vegetations at the anal orifice. Some of these lesions were shallow ulcerations and covered with small papillary vegetations. There was nothing abnormal on the mucous membrane of the mouth and throat. After being in the hospital some days, however, vesicles appeared on the lower border of the tongue.

The general condition was good during the whole course of the affection, which was about four months. The eruption in some respects resembled that from iodides or bromides, but neither bromide nor iodide was found in the urine. Moreover, the moist, succulent character of the bromide eruption was not observed.

The case, therefore, was characterized by the appearance of an intense pruritus and of bullæ, which dried and left an ulcerating surface which became vegetating and crusted. The eruption was especially marked upon the extremities, and spared the face. The lesions healed

in three weeks under the influence of simple treatment, and during this period there were no recurrences, except one bulla, followed by a vegetating ulcer and a few vesicles beneath the tongue. The resemblance of this case to dermatitis herpetiformis is evident. The writer thinks, however, that the absence of multiformity, the lack of eosinophilia in the liquid of the bullæ and of the blood, and the slightest accentuation of subjective sensations would be against classifying it as dermatitis herpetiformis. He thinks, therefore, that it is possible to admit the existence of a pemphigus vegetans of benign character, and that this observation is probably an example of it. It is possible, also, that the vegetating character is only an accidental complication of different morbid entities.

## DISEASES OF THE SWEAT AND SEBACEOUS GLANDS.

By HERMANN G. KLOTZ, M. D., New York.

### Elimination of Bacteria and Some Soluble (Bacterial) Substances Through the Sweat, Experimental Researches on.

A. BLUMENFIELD, *Arch. f. Derm.*, 84, 92, 1907.

B. experimented, mostly on the cat, with *Bac. pyocyaneus*, *B. prodigiosus*, *B. of typhoid* and of anthrax, gonococcus and meningococcus. Fresh fully virulent cultures suspended in physiologic salt solution were injected and the sweat was gathered from the balls of the toes after producing sweat by pilocarpin and the application of heat. In no instance could bacteria which had been introduced in the blood be found in the sweat; it seems, therefore, that micro-organisms circulating in the blood are not excreted with the sweat and that the elimination of bacteria is not a regular physiological function of the sweat glands. B. concludes that the sweat glands offer insuperable (mechanical?) obstacles to the bacteria. Of soluble substances iodide of potassium was eliminated with the sweat, but fluorescein and agglutinins were not; experiments with tetanus toxins were not conclusive.

### Symmetrical Naevi of the Face, Further Casuistic Contributions to the Multiple. MAX WINKLER, *Arch. f. Derm.*, 86, 129, 1907.

W., who has described five cases of syringoma or nevi cysto-epitheliomatosi in a former paper (*Arch. f. Derm.*, 67, 3, 1903), has added another case in which the connection of the tumor with the ducts of the sweat glands could be established without doubt.

**The Secretion and the Secreting Cells of the Anal Gland of the Duck.  
On the Effect of the Roentgen Rays on.**

MARGARETE STERN and L. HALBERSTAEDTER, *Arch. f. Derm.*, 85, 149, 1907.

M. St., who has studied the histology of the anal gland of the duck and of other birds (*Arch. f. Mikrosk. Anat.*, LXVI, 1905), has demonstrated by numerous experiments that these glands undergo considerable changes by the application of the X-rays. These changes at first are only functionary (decrease and gradual disappearance of the lipoid granules in the tubules of the first cell zone), but the final result is complete atrophy of the gland.

**On Syringoma (the So-called Lymphangioma Tuberosum Multiplex, Kaposi). SH. DOHI, *Arch. f. Derm.*, 88, 63, 1907.**

Dohi looks upon syringoma as a new growth which originates from deformed or misplaced buds or germs of sweat glands. They are sharply defined from the surroundings and show a different arrangement of the cutis tissue. These conditions seem to prove that we have to do with growths consisting of ectodermal and mesodermal elements, which, detached from their original physiological connections, were formed as separate bodies and began to grow spontaneously and independently.

**Malign Tumors of the Sweat Glands, Our Knowledge of. RICHARD WOLFHEIM, *Arch. f. Derm.*, 85, 277, 1907.**

A critical review of all the published cases of alleged malign tumors of the sweat glands eliminates all, except one published by Darier. W. contends that it is essential for the proof of the origin of a cancer of the skin from the coil glands, that either a sure connection with the ducts or tubes of sweat glands can be demonstrated, or with glandular formation which morphologically can be identified beyond any doubt with normal or misformed sweat glands. Primarily the condition of the elastic fibers has to be investigated, because their characteristic arrangement around the tumor masses indicates whether we have to do with sweat gland tissue or not. The destructive character of the tumor is not demonstrated alone by the formation of solid masses of cells and the breaking through the membrana limitans, but by the transgressing of the normal limits of the glandular tissue. All these conditions were demonstrated by the careful microscopical examination of a small tumor which was removed from the cheek of an elderly woman without ever having caused any symptoms; it therefore had to be considered as a really malignant tumor of the sweat glands.



Multiple Abscesses in Infants, On the Pathogenesis of.      FELIX LEWANDOWSKY, *Arch. f. Derm*, 80, 179; *D. Med. Woch*, 1950, Nov. 21, 1907.

By extensive examinations of several cases L. feels justified in stating that in these cases the origin of the multiple abscesses of infants from external infection of the skin by staphylococci could be demonstrated; it could also be proved that the staphylococci entered the infantile skin by way of the ducts of the sweat glands. Besides the abscesses there is present in these cases a superficial pustular affection, which has to be distinguished from the well-known vesicles of impetigo contagiosum. Histologically it is characterized by suppuration in and around the sweat pores, a "periporitis." For this periporitis a deeper abscess may originate. Some of the deeper abscesses are formed without any preceding pustules by staphylococci which (probably) have advanced into the deeper portions of the sweat ducts. These conditions suggest as a line of treatment the removal of the staphylococci from the sweat pores by the artificial production of copious sweating followed by bathing in or washing with disinfectants.

In the second paper L. confirms these conclusions and reports favorable results obtained in ten cases by such treatment. On the scalp where these abscesses very frequently occur, moist dressings of bichloride of mercury solutions were principally applied.

Granulosis Rubra Nasi, A Case of.      T. COLCOTT FOX, *Brit. Jour. Derm.*, XVI, V, XVIII, 317, Sept., 1906.

Granulosis Rubra Nasi (Jadassohn), A Further Contribution to.      J. M. H. MACLEOD, *Brit. Jour. Derm.*, V, XVIII, Dec., 1906.

Granulosis Rubra Nasi, A Case of.      H. G. ADAMSON, *Brit. Jour. Derm.*, V, XI, XIX, March, 1907.

In the case of Fox, in a boy, nine years of age, on the end of the nose a small crust was observed, surrounded by a number of isolated, red, semi-translucent, deep-seated, slightly-projecting nodules, the size of a pin's head. The nodules displayed a deep apple-jelly-like infiltration when pressed on by a glass, and were indistinguishable from the classical nodes of lupus vulgaris, such as recur on scars. After the removal of the crusts and the healing of the excoriation, half a dozen small vesicles or clear cysts had arisen on the affected area. The case proved very intractable to treatment, and when the cysts disappeared, the original nodules remained much as before. Free sweating at the end of the nose was noted on several occasions. Fox believes that these miliary, semi-translucent nodular phase have also been diagnosed as lupus vulgaris by others.

Macleod reports the further course of a case previously reported (*Brit. Jour. Derm*, V, XV, 1903, p. 197), which confirms the futility of



all local treatment. He also reports a new case in a boy, nine years of age, and gives a review of all cases published since 1902, but does not bring forth anything new in regard to the symptoms, the pathological anatomy, etiology, pathogenesis, diagnosis or treatment of the disease.

Adamson's case is that of a girl, nine years of age.

**Hyperidrosis Nigricans.** M. CH. AUDRY, *Ann. de Derm.*, 1906, p. 1080, *Soc. d. Derm.*

In a young man of general good health the thumb, index and middle finger of the right hand, *i. e.*, the portions of the hand in contact with the penholder during writing, showed a profuse hyperidrosis and a dark brown discoloration of the skin, which could not be removed by soap, but by alcohol. After drying the skin, in a few minutes a red color, accompanied by profuse perspiration, would appear, followed by a gradually deepening sepia color. There were no subjective symptoms. During vacation all symptoms disappeared, but returned on resuming of writing, although a new cork penholder was used.

**Erythema Annulare Recidivans, A Case of.** Bohac. *Archiv. of Derm. u. Syph.*, 1907, LXXXVI., 257.

The patient was a woman 38 years old who consulted Bohac for a localized annular eruption of the left cheek. Three times before she had had similar eruptions which had always begun in the same way, pursued the same course, recurred in the same situation and always came on in the fall. There were no subjective symptoms except very slight itching. The first manifestation of the eruption was a small bright red nodule about as large as the head of a pin. The patient stated that the nodule spread peripherally and that she had noticed that the borders of the lesion were always of a bright red color which was in striking contrast to the pale color of the centre, the contrast growing more pronounced with the extension and age of eruption. It took four or five months for the eruptions to reach the limit of extension, by which time it involved the entire left cheek from the lower lid to the level of the lower jaw and from the naso-labial fold to part way over the ear. As the periphery widened out the centre cleared up, the older lesions disappeared, the inflammation subsided and the normal color of the skin returned. The result was the formation of an irregular ring. Involution was marked, first, by a gradual paling, then by the formation of small broken segments and, finally, by complete disappearance without leaving any trace. The present eruption began as a small, pin's-head size, red nodule, which for three weeks remained unchanged in shape and size. Then it began to spread peripherally and, at the time of the examination, was said to be slowly but steadily extending. There had been no internal treatment. The external treatment had consisted of applications of lemon juice and a salve of unknown formula.

Examination showed on the left cheek an elliptical lesion about  $3\frac{1}{2}$  cm. long and 3 cm. wide, with its long axis downward. The border and centre presented different appearances. The border was  $\frac{3}{4}$  mm. wide, of a bright red color, rising up gradually from the surrounding skin to a height of about 2 mm. on its outer side. The inner edge was somewhat less elevated but descended more sharply. The summit of this elevated rim was more shiny than the normal skin and showed fine, barely visible irregularities in its surface but there were no projections or scales or vesicles. The bright red color did not entirely disappear on pressure, but left a soft, yellowish red tinge.

The central portion of the lesion was distinctly depressed below the level of the rim and had a much paler, more yellowish color which completely disappeared on pressure. Its surface was covered with a very fine brawny desquamation. Nowhere was there any tendency to atrophy or atrophic scarring.

As regards the further course of the disease, the spread continued for two weeks when it ceased. Then, after remaining without change for a week, the border began to grow paler and to flatten, continuing until only reddish macules remained. These, too, then disappeared, from the lower border first and from the upper more slowly, so that two months later they were still although barely visible.

In the differential diagnosis, Bohac considered principally Menokelis (Fuchs) and a fixed, localized antipyrin eruption.

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#### DEATH OF DR. MONTGOMERY.

Dr. Frank Hugh Montgomery, of Chicago, associate professor of skin, genito-urinary and venereal diseases, Rush Medical College, a member of the American Dermatological Association, was accidentally drowned while boating on White Lake, Michigan, July 14, aged 46.

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## TROPICAL FORMS OF PITYRIASIS VERSICOLOR

BY ALDO CASTELLANI, M. D.,

Director of the Clinic for Tropical Diseases, Colombo (Ceylon).

**I**N the *British Medical Journal*, November 11, 1905, I published a preliminary note in which I stated that in the Tropics there are found several forms of pityriasis versicolor. I described two principal varieties, one yellow, under the name of pityriasis flava; the other black, under the name of pityriasis nigra. Further investigations have enabled me to confirm and enlarge these observations.

*Pityriasis versicolor flava*.—This is the commonest form, and in my opinion there are several sub-varieties of it. The affected parts are yellowish, of much lighter color than the surrounding healthy skin; the yellow color may be of various tinges, from dark, deep, orange-yellow in some cases, to very light canary-yellow in others. The patches are of various sizes; generally roundish, smooth, sharply defined, with margins not elevated, or only slightly so. Sometimes the patches are irregularly festooned, and may encircle areas of healthy skin. Occasionally the encircled healthy skin appears to be intersected by many yellowish, ribbon-like lines originating from the surrounding yellow patch. The regions most frequently affected are, in order of frequency, the face, neck, chest, and abdomen. Large portions of the body may be involved. There is no pruritus. The patches are not desquamating, or only very slightly so. The course of pityriasis flava is very chronic. In the natives of the lower classes it appears in childhood as tiny spots on the face and chest, spreading slowly during years; they may coalesce, covering practically the whole of the face and chest. One is occasionally surprised to see a native whose face and chest are quite light in color; on closer examination it may be found that this lighter appearance is due to a diffuse, very light-colored form of pityriasis flava, covering the whole of the face, neck and chest. In native women, when the patches of pityriasis flava are small, light, and situated on the face, they are considered as beauty spots, and are highly appreciated by the ladies and their admirers. Such

patches are called in Singhalese, "alu-hama," which means ashy skin (*alu*, ash, *hama*, skin). There is also another word used by native poets for such condition, "gomera," which means skin dotted with beauty spots.

The disease in Ceylon and India usually affects natives only (Singhalese, Tamils, etc.), more rarely Burghers. I have seen one case among Europeans. The patient has been in the Island for twenty years, and is a planter on a tea estate. He noticed the first light yellowish spots on the skin of the right arm six years ago; the eruption spread, slowly but continuously, to the neck and trunk; some spots are to be seen on the legs also. He has no pruritus whatever. The patient thinks he has been infected by some coolie affected with the disease.

*Peculiar variety of pityriasis flava.*—I have recently come across a peculiar variety of pityriasis flava characterized by a reddish-yellowish, or copper-colored tint. The fungus is microscopically indistinguishable from the fungus of the typical pityriasis flava, and cannot, likewise, be grown. I have seen several cases among natives of lighter complexion, and a most interesting one among Europeans. In the European the eruption was of four months' duration; he was sent to me with a diagnosis of seborrhœa corporis. The eruption was localized to the skin of the chest; numerous reddish spots, with perhaps a yellowish tinge, were present; some of which had coalesced in larger patches; no pruritus. The microscopical examination of scrapings from the eruption in liquor potassæ revealed the presence of a fungus microscopically identical with the fungus of pityriasis flava.

The fungus was very abundant.

*Pityriasis versicolor alba.*—This might perhaps be considered as a variety of pityriasis lutea. The color, however, is extremely light, occasionally altogether white; and the fungus found, as described later, is quite different from the one found in pityriasis lutea. Pityriasis alba is oftener seen on the arms and legs than on the face and chest. The patches are frequently slightly elevated and are not so smooth as those of pityriasis lutea generally are; a slight degree of very fine pityriasic white desquamation is often present. The fungus is very abundant. The infection in contrast to pityriasis flava is very easily cured with the ordinary antiparasitic substances.

*Pityriasis versicolor nigra.*—The affected parts are of a dull black, lusterless color, much darker than the surrounding dark,



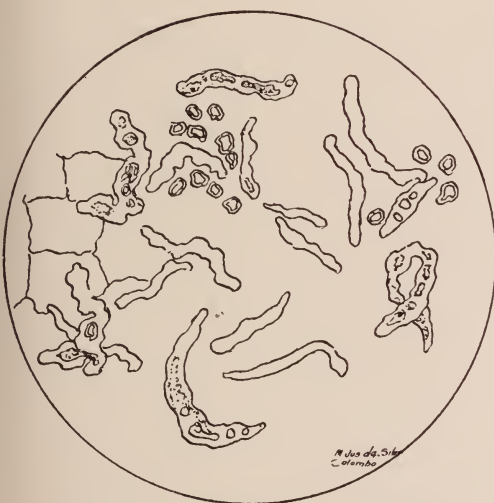
PLATE XXXIV.—To Illustrate Dr. Aldo Castellani's Article, Tropical Forms of Pityriasis Versicolor.



Patient affected with Pityriasis Flava (face) and Pityriasis Nigra (neck).



healthy skin of the native. The patches may be small, roundish, and separated from each other, or may coalesce; the patches are often very slightly elevated, and may present a slight desquamation. Little, if any, pruritus is present. The face is not usually affected in this type of pityriasis, though the eruption may be found on practically any other region of the body. The neck and upper portion of the chest are apparently the regions most frequently affected. Pityriasis nigra usually attacks natives only. I have seen, however, an identical or similar form in a European. This European went for a pleasure trip to Burmah, where he remained for about a month. On coming back to Ceylon he noticed a small, roundish, very slightly elevated, non-desquamating black patch on the palm of his left hand. There was no pruritus. The patch spread slowly for two months, reaching the size of a sixpenny piece. It disappeared after a single application of formalin; three months later



Microsporon Tropicum (Castellani)  
Fresh preparation in liq. potassae from an  
old case of pityriasis flava.



Microsporon Mansoni (Castellani) Draw-  
ing taken from a fresh preparation in liq.  
potassæ.

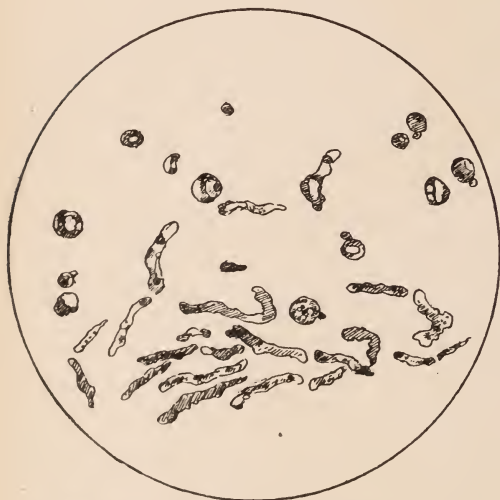
it reappeared in the same place as a tiny black dot, which slowly spread. Another application of formalin caused it to disappear. From the patch a fungus was grown apparently identical with the one found in the usual form of pityriasis nigra.

*Mixed Infections.*—It is not at all rare to find different varieties of pityriasis versicolor in the same patient; a mixed infection of pityriasis nigra and flava, for instance, is somewhat frequently met

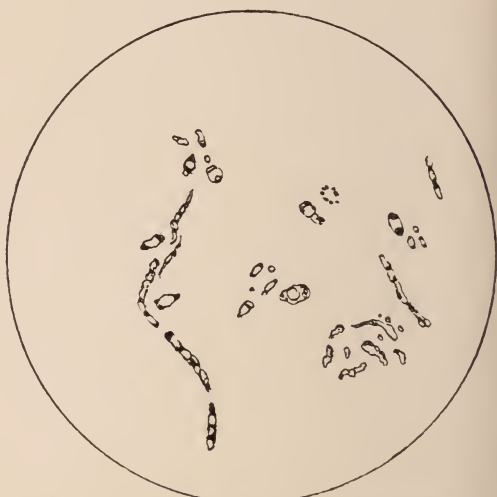
with. Several of my patients had on the neck a few round patches of pityriasis versicolor nigra, and on the face and chest some smooth yellow roundish patches of pityriasis flava.

DESCRIPTION OF THE FUNGI FOUND IN THE VARIOUS TROPICAL FORMS  
OF PITYRIASIS VERSICOLOR

*Microsporon Tropicum*.—I suggested this name (1905) for the fungus found in the pityriasis versicolor flava. The mycelial threads are generally thick with numerous swellings, constrictions, and other irregularities in their shape; they may occasionally contain specks of pigment. The spores are roundish or oval, 3.50 to 4.50 microns, and may have a double contour. In fresh cases the fungus is abundant with plenty of mycelium and spores which occasionally run into clusters; in old chronic patches the fungus becomes very scanty; the spores are not numerous, and generally do not collect in clusters; the mycelium is very scanty, and is even more



*Microsporon Mansoni* (Castellani) Preparation stained with fuchsin.



*Microsporon Macfadyeni* (Castellani) Parasite stained with fuchsin.

irregular in shape than in fresh patches (degeneration forms of the fungus). I have not been able to grow this fungus.

*M. Macfadyeni*.—This name was given by me to the fungus found in pityriasis alba. The fungus is very abundant, mycelium and spores are of small dimensions, much smaller than in the *M. Tropicum* and *M. Mansoni*. The mycelial tubes are often short



PLATE XXXV.—To Illustrate Dr. Aldo Castellani's Article, Tropical Forms  
of Pityriasis Versicolor.



Patient affected with Pityriasis Flava.



and thin; regular in outline and often straight. The spores are small, 3 to 3.50 microns, oval in shape, sometimes the spores form large clusters. I have been able to grow the fungus on two occasions only, using Sabourand's maltose agar. The fungus grew extremely slowly, giving rise to yellowish colonies which coalesced into a raised yellow mass, deeply pitted, very firmly and deeply rooted into the medium. Subcultures have never succeeded.

*M. Mansoni*.—I suggested this name (1905) for the fungus found in pityriasis nigra. The fungus is abundant; the mycelial threads are rather short, 18 to 20 microns in length, and 2.50 microns in breadth. Sometimes they may be irregular in outline, bent, banana-shaped, etc. The spores are globular and most of them very large, 5 to 7.50 microns. They are frequently arranged in clusters. This fungus is easily cultivated by inoculating scrapings of the affected patches in maltose agar, plates, and tubes. The principal cultural characters are as follows:

*Maltose agar*.—The growth, especially in subcultures, is comparatively rapid. After two or three days, roundish, hemispheric colonies appear; the colonies are black, sometimes with a dark greenish tint at first; the colonies may present at the periphery some radiating delicate pale greenish hyphæ. The colonies soon coalesce into a jet-black knobby mass, deeply rooted into the medium.

*Common agar*.—The growth is similar to that found in maltose agar, only much less abundant and less rapid.

*Glucose, saccharose, mannite agar*.—Same characteristics as found in maltose cultures, though the growth is less abundant.

*Broth and peptone water*.—The fungus grows very slowly at the bottom of the tube, forming a black, or greenish-black sediment.

*Milk*.—Very slight growth; the milk is not rendered acid nor clotted.

*Gelatine*.—The fungus grows very slowly; for the first three or four weeks there is no liquefaction of the medium, then a very slight liquefaction generally takes place.

*Temperature*.—The fungus grows best at a temperature varying from 30° to 32° C; over 35° and under 25° the growth is much slower.

*Fructification of M. Mansoni*.—The fructification has been studied by making impression preparations and hanging drops. It takes place by formation of sprouts and clusters of spores and by endoconidia; aspergillar fructifications have never been observed.

*Diagnosis*.—The difference in color between pityriasis flava

and pityriasis nigra is so characteristic that the two affections cannot be confused.

The diagnosis between pityriasis flava of a light variety, and pityriasis alba may sometimes be difficult; in pityriasis alba, however, there is always a fine whitish, pityriasic desquamation, the patches are slightly elevated and not so smooth; the face and chest are not the regions most frequently affected. The microscopical examination will reveal the presence of a fungus with thin, straight mycelium, and small oval spores; different from the irregularly shaped fungus found in pityriasis flava.

*Pityriasis versicolor of Temperate Zones.*—Of the various forms of pityriasis existent in the Tropics pityriasis flava *only* might be confused with the European form as regards color of the patches and the microscopical appearance of the fungus, which in neither form can be grown on artificial media.

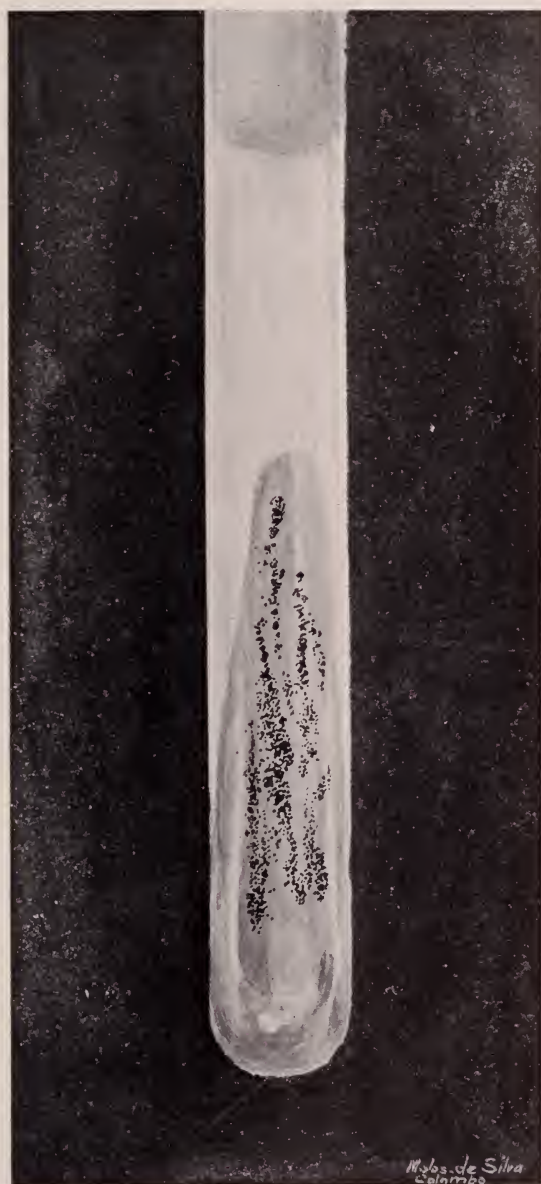
The pityriasis of temperate zones, however, is generally not of so light a tinge, never attacks the face, and is curable with the greatest facility; while pityriasis flava affects the face more frequently than any other part of the body, and is curable only with great difficulty. It has been stated by Powell and others that the reason why pityriasis versicolor is in the Tropics so commonly found on the face is due to the fact that natives seldom wash the face. This, in my opinion, is not so; natives of Ceylon, at least, wash often and are very fond of bathing. Moreover, I have been able to make this observation: three of my attendants, Singhalese, shave regularly every other day, using plenty of strong shaving soap. I have had them under observation for nearly three years. The patches of pityriasis which were present on their cheeks three years ago are still there—in fact they have spread.

*Pinta.*—The various forms of pityriasis met with in the Tropics might be confused with pinta, of which, as is well known, there are several varieties, black, white, etc. The microscopical examination will clear the diagnosis at once: the fungus in all the various forms of pinta has the characters of an aspergillus; but in the various forms of pityriasis versicolor, the characters of a microsporon.

*Leukoderma.*—Only on very superficial observation can patches of pityriasis be mistaken for patches of leukoderma. Leukoderma patches have a characteristic dead-white color which is not found in any form of pityriasis, not even in pityriasis versicolor alba, in which there is besides, frequently, a fine whitish desquamation which is never present in leukoderma. In case of doubt the microscopical examination would establish the diagnosis at once.



PLATE XXXVI.—To Illustrate Dr. Aldo Castellani's Article, Tropical Forms  
of Pityriasis Versicolor.



*Microsporon Mansoni* (Castellani) young culture on Maltose-agar.



*Circumscribed Scleroderma (Morphoea).*—In this disease the patches may present a peculiar yellowish tinge, which in colored patients may resemble some varieties of pityriasis flava. In pityriasis flava, however, there is no change in the texture of the skin, which is still pliable and does not exhibit the peculiar parchment-like feeling of scleroderma. The microscopical examination will clear the diagnosis in any doubtful case.

*Seborrhoea corporis.*—The peculiar reddish-yellowish variety of pityriasis flava I have described might, on superficial observation, be mistaken for a form of seborrhoea corporis, very common in the Tropics among Europeans. The microscopical examination will clear the diagnosis.

*Prognosis and Treatment.*—None of the Tropical forms of pityriasis versicolor shows any tendency to spontaneous cure. All the forms are very chronic and may last for life. The forms that yield most readily to treatment are pityriasis nigra and pityriasis alba; the most obstinate is pityriasis flava. For pityriasis nigra and alba the usual antiparasitic lotions and ointments answer well; a salicylic spirit lotion (4 per cent.) followed by a mild mercurial ointment as, for example, white precipitate grs. x to xv to the ounce of vaseline, gives good results.

Pityriasis flava is much more difficult to deal with; turpentine applied every day and followed by a betanaphthol or epicarin ointment is often successful; but the treatment must be continued for months. It is to be noted that in several cases of pityriasis flava the fungus has apparently a deep, permanent disturbing action on the pigmentation processes of the skin, as even when the fungus has been destroyed the patches remain of a lighter color than the surrounding skin for a long time, though ultimately they become again normally pigmented.

## NOTE ON *TINEA IMBRICATA* AND ITS TREATMENT.

BY ALDO CASTELLANI, M. D.,

Director of the Clinic for Tropical Diseases Colombo (Ceylon).

AS a small addition to the present knowledge of the geographical distribution of *tinea imbricata* (Manson), it may be desirable to put on record the cases of the disease I have seen in Ceylon, in which country as well as in India it is stated to be non-existent.

Eleven cases have come under my observation during the four years I have been in Ceylon. The first of these cases was briefly described by me in the *Brit. Med. Journal*, Nov. 26, 1905. All the cases have come from villages near Colombo, with the exception of one—a Tamil coolie coming from Southern India—and most of them have been treated as out-patients. They were all typical cases; in all of them Manson's fungus was easily detected. I will limit myself to giving a brief clinical history of the patient whose photograph and sketch are attached in this paper.

James,—Singhalese villager, twenty-six years of age; entered the clinic on March 20, 1906. No disease of importance in the past. The present eruption, according to the patient, had begun eighteen months before in the right shoulder, and from there spread slowly but steadily; was treated without receiving any benefit by several *vederallas* (native medicine men). The disease did not cause any disturbance in the general health, but he complained of the disfigurement and the unbearable pruritus. At the time of admission the eruption was found to extend over practically the whole of the body with the exception of the scalp; the palms, soles of the feet, lower part of the face, and the axillary regions were affected, though it is generally stated that the disease does not affect either the face or the axilla, and is rarely found on the palms and soles. The eruption was most typical on the chest, back, and axilla. Several round patches were present, each presenting concentric scaly rings. The scales were flaky, very dry, of a dirty greyish color, and slightly curled; they were of various dimensions; if the scales were removed rings of concentric circular dark lines could be seen.



The number of rings forming the patch varied, in some patches eight or ten could be seen, though Tribondeau states they are generally not more than four.

On the abdomen, arms, and legs, the patches had coalesced and their disposition in rings could not be seen. The thin flaky, curled scales were, however, quite typical. On the forearms and hands numerous warts were present; the nails were thickened, having a rough surface and cracks; scrapings taken from them show the fungus. The nails being affected is against the experience of most authors.

*Physical examination.*—Negative for all organs.

The urine, slightly alkaline, and loaded with carbonates, this being probably due to the vegetarian diet of the patient.

Stools, ova of *ascaris lumbricoides* and *trichocephalus dispar* present.

Blood, hæmoglobin 70 (Fleishl).

Number of red blood cells.....	4,100,000
Leucocytes .....	9,000

DIFFERENTIAL COUNT:

	PER CENT.
Polymorphonuclear .....	50
Large mononuclear .....	10
Small mononuclear .....	20
Eosinophiles .....	18
Transition forms .....	2

A certain degree of eosinophilia was also present in four other patients. I am inclined to think that the eosinophilia is partly due to the numerous intestinal worms present in all patients.

*The fungus.*—Fresh preparations of scales in liquor potassae were made and also stained preparations, using Walker's modification of Morris' method. In all the cases Manson's trichophyton (*T. concentricum* Blanchard) was found to be very abundant. The characters of the fungus corresponded much more closely to the descriptions given by Manson, and recently by Pernet, rather than to the description given by Tribondeau and others.

Fresh preparations of scales show a diffuse mass of interlacing mycelium. The segments of the mycelium vary greatly in length. They are generally straight and of regular outline not showing swellings and constrictions. The spores are rather large, oval, or rectangular. Aspergillar fructifications which have been described by several authors have never been observed by me. In two cases

I tried to grow the fungus, using various media, but failed. My experiments, however, on the growth of the fungus were very few, and it is to be noted that Tribondeau and others have succeeded in growing it in several cases.

*Treatment.*—Every medical man practicing in the Tropics well knows how difficult is the treatment of *tinea imbricata*; it is easy to obtain temporary improvement, and even an apparent disappearance of the eruption; but as soon as the treatment is discontinued the eruption, as a rule, begins afresh.

In the Colombo clinic I have made various experiments to test



Fungus of *Tinea Imbricata*.

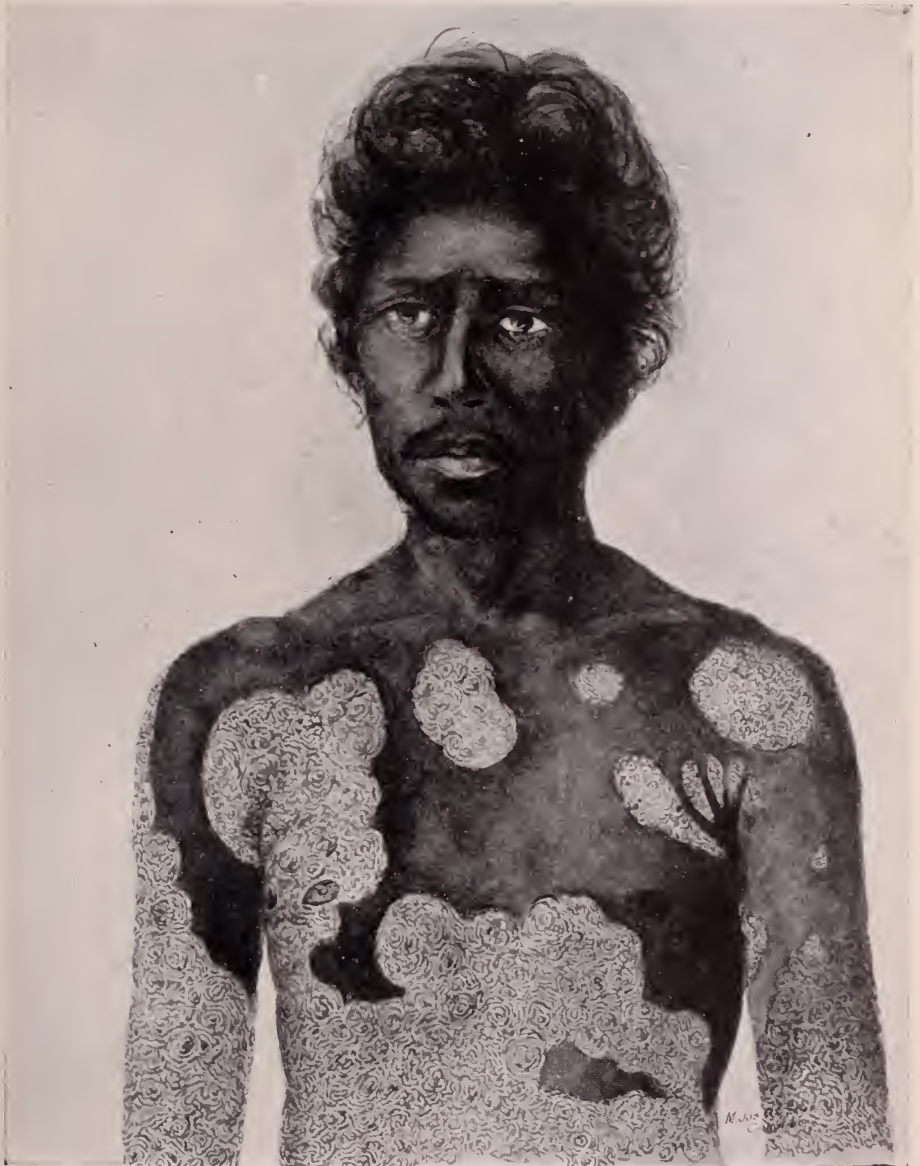
From a preparation stained by the Morris-Walker method.

the efficacy of the various medicaments by applying contemporarily different liniments, ointments, etc., to symmetrical parts of the body and comparing the results. The medicaments employed by me were sulphur, calomel, white precipitate, red precipitate, turpentine, etc.

*Sulphur* has practically no effect whatever on the fungus.

*Turpentine* induces generally a slight improvement, some scales disappearing and the skin becoming smoother; the improvement,

PLATE XXXVII:—To Illustrate Dr. Aldo Castellani's Article,  
*Tinea Imbricata*.



Patient affected with *Tinea Imbricata*.





however, is not permanent, and as soon as the turpentine application is discontinued, the typical scales reappear.

*Calomel, white precipitate*, and other ointments of mercurial preparations do not induce any improvement in the eruption.

*Thymol naphthol* ointments may cause a slight improvement.

*Carbolic acid and epicarin* ointments have no effect whatever.

*Cyllin* ointment (20 to 50 per cent.) may induce a temporary improvement.

*Formalin* is very effective for localized patches. The usual 40 per cent. solution is applied with care, treating each time a small portion of the eruption. Formalin often causes severe pain and a certain degree of inflammation, which is best relieved by applications of iced water. Soon after the application of formalin the patches become dark brownish, which color lasts for a few days, when they clear. Care must be taken not to apply the formalin to too large portions of the skin, and not to repeat the application too often, otherwise a peculiar form of depigmentation similar to leukoderma patches may appear later on, to which disfigurement colored patients strongly object.

*T. iodine and linim. iodine.*—T. Iodine freely applied induces a very marked improvement, which, however, is not permanent. Strong Linimenta iodi., as recommended by Manson, is most effective; it cannot be used freely, however, on patients with a delicate skin, such as women and children.

*Chrysarobin.*—The repeated application of chrysarobin in ointment (gr. xxx to one ounce of vaseline) may induce a strikingly rapid improvement in cases which are not of long standing; in my experience, however, the eruption recommences a few days or weeks after its apparent disappearance. Chrysarobin is a very toxic medicament, the patient must be watched and the urine regularly examined; in one of my cases symptoms of absorption appeared after a single application.

*Salicylic acid and methyl salicylate* have very little, if any, action of the fungus.

*Resorcin and Tr. Benzoin.*—Resorcin alone, or mixed with salicylic acid, in alcoholic solution and ointments, has very little efficacy. If, however, resorcin is dissolved in Tr. benzoin Co. (gr. xxx to 60 of resorcin, to one ounce of the Tr. benzoin) very good results are obtained: it is now my routine treatment for *tinea imbricata*.

It is to be noted that Tr. benzoin without resorcin has very

little action of the eruption. I generally apply freely the resorcin dissolved in Tr. benzoin once or twice daily on the affected regions; if the whole body is affected, one day one half is painted and the other day the other half, alternately. The treatment must be continued for several weeks.

Once or twice a week the patient is given a very hot bath and scrubbed all over with sand soap. I have treated in this way five cases, all of whom left the clinic apparently cured. I have had opportunity to see three of them again after four months: two remained well; in one, two small patches had reappeared on the right shoulder. So far I have not observed symptoms of absorption; in fact the patient who showed symptoms of absorption after chrysarobin, stood the resorcin treatment well. It is always prudent, however, to proceed at first with care, as it is well known that individuals may be met with, though rarely, showing idiosyncrasy for resorcin.

*Conclusions.*—1. The geographical distribution of tinea imbricata is more extensive than was hitherto supposed, as it includes Ceylon and probably some parts of India.

2. The treatment of tinea imbricata is very difficult; the best results perhaps are obtained by using strong Lin. iodi. as suggested by Manson; or resorcin dissolved in Tr. benzoin Co, as suggested by myself.

## TINEA INTERSECTA.

BY ALDO CASTELLANI, M. D.,

Director of the Clinic for Tropical Diseases Colombo (Ceylon).

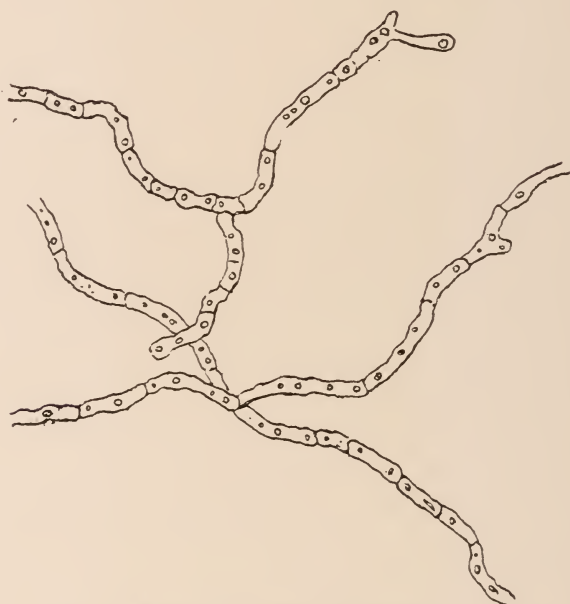
I HAVE had the opportunity to investigate, in Ceylon, two cases of a peculiar dermatomycosis, which, so far as I know, has not yet been described, and for which I suggest the name of *tinea intersecta*. Both patients were Tamil; in one the eruption developed while he was convalescent from typhoid fever. The eruption showed identical characters in both patients and ran the same course. Small oval or roundish, very slightly elevated, itching spots appeared on the skin of the arms, chest, and back; in the second patient on the legs also: the margins of these patches were occasionally slightly raised. The patches were dark brown, much darker than the surrounding skin, and presented a smooth tense surface at first; they increased in size slowly and some coalesced. After a certain time the surface of the patches is no longer tense; it becomes somewhat shriveled and dry; superficial cracks appear, so that white lines are visible intersecting the brown surface of the patches; later the cracks become deeper, the epidermis splits, and several flaky curled-up scales, whitish inside and dark on the outer surface, are seen; the scales are often removed by friction, etc., and whitish patches only may remain.

The eruption never develops in concentric rings like *tinea imbricata*; the patches remain isolated or fuse together, forming irregular larger patches. Some patches may disappear spontaneously after a time. The general health of the patients does not seem to be affected; in both my patients a slight degree of eosinophilia, 8 per cent. in one case and 6 per cent. in the other, was present. The eosinophilia, however, may have been due to the intestinal worms which both patients harbored—as shown by the examination of the stools which contained ova of *ascaris lumbricoides* and *trichocephalus dispar*.

*Transmission of the disease.*—I made one of the patients scratch with his nails some of his patches and then scratch a healthy Tamil coolie, who volunteered for the experiment, on the arms and upper

part of the chest. On the arms nothing developed; on the chest at the inoculated place there was—on the second and third day—much itching; on the fourth day two tiny dark very slightly elevated roundish spots appeared, these enlarged slowly and a few days later their surface showed several whitish cracks. Unfortunately at that time the coolie—who was complaining of great itching—scrubbed himself thoroughly with sand soap, with the result that the patches disappeared.

*The fungus.*—If a portion of one of the brown patches or a scale is removed and treated with liquor potassae, the fungus is



Fungus of *Tinea Intersecta*.  
Drawing from a fresh preparation in liq. potassæ.

easily detected. The fungus grows apparently between the superficial and the deep strata of the epidermis. The fungus is present on the inner surface of the scales, but not on the external surface.

The fungus presents the general characters of a trichophyton; what is very remarkable is the extreme rarity of free spores, in fact in none of my preparations have I been able to detect any. The mycelium is fairly abundant, though far from being so abundant as in *tinea imbricata*. The mycelium is composed of long straight articulated threads which are sometimes dichotomous, the breadth



PLATE XXXVIII.—To Illustrate Dr. Aldo Castellani's Article,  
*Tinea Intersecta*.



Forearm of patient affected with *Tinea Intersecta*.



being between 3 and  $3\frac{1}{2}$  microns. Endospores are present as well as endoconidia. No aspergillar fructifications nor clusters of spores are to be seen. So far I have not succeeded in growing the fungus.

*Diagnosis and treatment.*—When the eruption is in the very first stage it might be mistaken for a form of tropical pityriasis versicolor. In pityriasis, however, the epidermis does not split; moreover in tinea intersecta the fungus is not found on the surface—it grows between the superficial and deep layers of the epidermis.

*Tinea Imbricata.*—In contrast to tinea imbricata the eruption never develops in concentric circles; is far less severe, as patches may disappear spontaneously; and is cured without much difficulty. At the time I had in my clinic the two cases of tinea intersecta, I had also two cases of tinea imbricata: the two eruptions could not possibly be confounded.

*Treatment.*—Tr. iodine and the usual antiseptic ointments answer well.

## LARGE DOSES OF QUININE IN THE TREATMENT OF DERMATITIS EXFOLIATIVA, WITH REPORT OF SIX CASES.

W. H. MOOK, M. D.,

Associate Physician, St. Louis Skin and Cancer Hospital.

THE use of quinine in the treatment of dermatitis exfoliativa, and pityriasis rubra, was begun in 1904, and was given to the first patient on the theory that he had malaria, concomitant with his skin condition, although his blood did not contain plasmodia. The first patient was an Italian, about forty years of age, suffering from an universal exfoliating dermatitis, which had been present about four months. He had been in the New York Skin and Cancer Hospital under the service of Dr. L. Duncan Bulkley, to whom I am indebted for the privilege of reporting the case, and was treated for some weeks with various local applications, and internal medication, with indifferent success. Physical examination revealed no visceral abnormalities other than an inguinal hernia. The entire cutaneous surface was covered with loosely adherent, large and small, dry scales. The skin was dark bluish red, owing partially to his normal swarthy complexion, and the only subjective symptoms were slight burning and occasional paroxysms of pruritus. There was marked œdema of the skin of his legs, with occasional excoriations and oozing. At times he seemed to be improving, when suddenly he would suffer from chilly sensations, rarely severe rigors, and the exfoliation would become more profuse, the œdema of the skin of his legs more marked, and his feelings of malaise increased. Several examinations of his blood were made for plasmodia malarie, but always with negative results. One day, after marked chilliness, thinking malaria a complication of his skin affection, he was given ten grains of quinine sulphate and the next day he stated that he felt better than he had for some time. The dose was repeated for several days, and marked improvement in his skin and physical condition resulted. The quinine was then increased to thirty and forty grains a day, the amount being governed by the tinnitus aurium, and within ten days there was much less scaling, the œdema of his legs markedly decreased, and his physical condition wonderfully improved. The exfoliation stopped within four weeks, and the patient was entirely well within two months. He was then operated upon





Fig. 1. Pityriasis Rubra (Hebra). Fourth patient.



for his inguinal hernia, from which he made an uneventful recovery; the wound healed by first intention, and he was discharged cured.

The second case, L. K., twenty-five years of age, a patient at the St. Louis Skin and Cancer Hospital, service of Dr. M. F. Engman, was seen two weeks after the attack began. His first symptoms were a feeling of prostration and malaise, having been perfectly well until the attack, and within twenty-four hours his face and trunk became very red, and he suffered a burning sensation all over his body. His hands and face, especially the eyelids, became puffed with œdema, and he suffered from chilly sensations. The erythema spread rapidly and became universal. There was marked enlargement of the inguinal glands. A tentative diagnosis of ptomaine poisoning, with toxic erythema, was made, and he was treated accordingly. Within ten days exfoliation was profuse, with no diminution in the erythema, and no improvement in his physical condition. The case then looked more of the dermatitis exfoliativa type, and he was given ten grains of quinine sulphate three times a day, with a local application of Lassar's paste. Within a month the scaling had stopped entirely, though the skin was still somewhat erythematous. The quinine was continued, and within three months he was discharged entirely well. He remained this way for two months, when he returned to the clinic suffering from an erythema of the face, head, and hands. He again entered the hospital and was given ten grains of quinine three times a day. For a few days he suffered chilly sensations, but the erythema did not spread, and the exfoliation which had begun, rapidly subsided. He was discharged three weeks later entirely well.

The third patient, J. L. G., was a case of undoubted pityriasis rubra of the Hebra type. He was a private patient, referred to Dr. M. F. Engman, to whom I am indebted for the privilege of reporting the case. He is a native of St. Louis, seventy-four years of age, and had been suffering from his skin affection eighteen months when first seen. He stated he had suffered frequent attacks of rheumatism during his life, until an operation for cataract in his left eye was performed, after which the eye had become destroyed, possibly from infection. He suffered no more from rheumatism. About this time his skin began to get red and scaly on his face and scalp, and the condition spread rapidly over his entire body, becoming an universal exfoliating dermatitis. He was first seen on July 25, 1907. Physical examination revealed no visceral lesions other than cataract of the eye, though he complained of general weakness. His pulse was full and regular, his temperature normal, and appetite and di-

gestion good. Examination showed his entire cutaneous surface to be covered with masses of large and small scales, very profuse and loosely adherent. The hair had disappeared except in small areas on the posterior scalp, and what little was left was fine and dry. The skin was of a violaceous hue, especially on the trunk and lower extremities, and a livid red on the face and neck. In texture, it was considerably thickened, and could be grasped between the fingers with difficulty. The nails, especially those on the toes, were corrugated, thickened, very rough, and yellowish in color. The legs were almost twice their normal size, from the œdema, and the lower halves were covered with excoriations from which there was considerable lymph constantly oozing. He was subject to frequent chilly sensations at irregular intervals, with occasional severe rigors. He stated he seldom, if ever, suffered febrile symptoms. The blood examination, made by Dr. W. Baumgarten, was as follows:

Red blood corpuscles.....	5,016,000
Hæmoglobin .....	65%
Color index.....	648
Leucocytes .....	2.6
Differential count.....	332 cells counted
Small mononuclears.....	16.8
Large mononuclears.....	none
Transitional .....	none
Polymorph. neutrophiles.....	60.2
Eosinophiles .....	21.6
Mast Cells.....	1.2
Myelocytes .....	none

No malarial parasites found, and red cells very pale. No misshapen, or nucleated cells.

Five grain quinine capsules were ordered every two hours, oftener if possible, until tinnitus aurium would be produced; starch and soda baths, and a very mild tar oil.

Three days later he was visited again and the scaling and œdema of the legs were considerably reduced. He had been taking fifty grains of quinine daily. The specific gravity of his urine was 1011 and there was a great excess of indican, otherwise normal.

August 4th, ten days later, nearly all of the œdema had disappeared from his legs, the excoriations had practically healed, the exfoliation of the epidermis greatly lessened, and his physical condi-



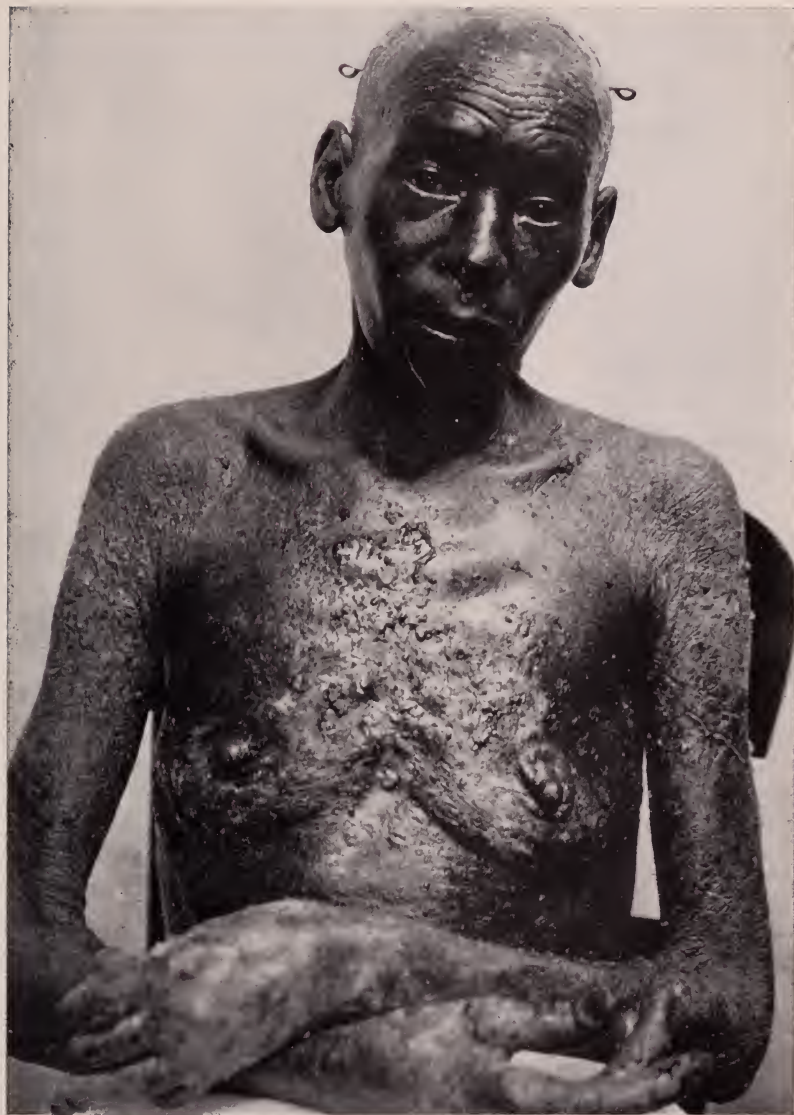


Fig. 2. Pityriasis Rubra (Hebra). Fourth patient.



tion had improved wonderfully. His afternoon temperature on some days went down to ninety-seven degrees, though it was usually normal. All local applications, except a daily starch and soda bath, were stopped. The quinine was ordered to be increased, giving ten grains every two hours unless contraindications should arise. He was again seen the next week, and had made rapid progress. There was very little scaling, the skin was much paler, the œdema of his legs had entirely disappeared; he slept ten or twelve hours every night, his appetite increased, and he stated that he was feeling very comfortable. His quinine had been increased until at one time he had taken eighty-five grains over a period of twelve hours, producing marked tinnitus aurium, and rather marked deafness; it was then reduced to seventy grains daily, from which he suffered no inconvenience, other than slight deafness. His urine showed no abnormalities at this time. From week to week the quinine was reduced to ten and fifteen grains daily; but this procedure was followed by a reappearance of the scaling and œdema of the legs, with oozing, which rapidly subsided under increased doses of the quinine. At no time did his urine show albumin, or sugar, and was usually light amber in color. He seemed to suffer no inconvenience from the quinine, except slight deafness, when the daily dose was too large. He remained in this condition for two months, and finally left the city for a visit to Michigan two months ago, at which time there were only a few slightly scaling areas.

In answer to a request from his daughter regarding his condition, I will quote a portion of her letter.

"The quinine was stopped entirely for a few days prior to his departure. His condition was worse about the last days of this month (January), and I was very much worried about him as he seemed so much worse. Moisture exuded and his clothing adhered to the skin of his legs so that it was difficult to remove. For several days he refused to take the quinine as he imagined it was hurting him. He was so nervous, cross, and irritable that I did not know what to do. Finally I persuaded him to go back to the quinine, with the result that the skin dried, the swelling subsided, he was quiet, and rested during the night. Yesterday and to-day he has been comparatively easy. There is still some little scaling."

The fourth patient was a negro woman, another case of pityriasis rubra of the Hebra type, and so far as I know, the only case of this disease occurring in the negro. S. C., age about thirty-five years, entered the St. Louis Skin and Cancer Hospital, July 3, 1907,

under the service of Dr. M. F. Engman. Only a clinical history of this patient will be given, as a detailed report in full of the study of the case, with the post-mortem findings will be published later. She was very much emaciated, weighing about eighty pounds, and was very weak. Her health had been very good up to the time of the present illness, which had begun twenty-one months previously. In September, 1905, her hands became swollen and scaly, and she suffered with a severe chill, followed by fever lasting several days. The palms were fissured, and soon the feet were involved in the same manner. A scaly condition developed and gradually spread up the legs and arms, over the body; the face and head becoming last involved. After the entire cutaneous surface had become involved in a continually scaling condition, the hair began to fall, until there were only a few left on the occipital region. Even the eyelashes had disappeared. The scales, loosely adherent, were large and small, dry and gray in color. The skin was very dry, perspiration occasionally appeared, but only on the face. The only subjective symptoms were occasional pruritus, burning and pain from ulceration. She stated that during the earlier part of her illness her legs were much swollen. When she entered the hospital the skin of the legs, ankles, and feet was atrophic, and many reddish-white cicatrices were seen. The entire hands were very atrophic, the scars having become so marked as not to allow more than slight bending of the fingers. The entire skin of the chest was cicatrized, and many ulcerations, secondary to the atrophy, were present. The legs too, showed isolated superficial ulceration. Examination of the urine showed 1008 Sp. Gr., no albumin or sugar, no indican, few epithelial cells, and leukocytes, urates and uric acid.

Several examinations of the blood, made by Dr. G. McConnell, the Pathologist of the hospital, showed she had acute lymphatic leucæmia. An average differential count being as follows:

Erythroctes .....	2,200,000
Leucocytes .....	480,000
Polymorphonuclear .....	15%
Large lymphocytes .....	16%
Small lymphocytes .....	67.4%
Transitional .....	.8%
No eosinophiles found.	

Two weeks after her entrance into the hospital she was given quinine sulphate, thirty to forty-five grains a day, according to the





Fig. 3. Dermatitis Exfoliativa. Sixth patient.



tinnitus aurium produced. The skin began to improve almost immediately; the scaling, after some weeks, being hardly noticeable; the ulcerations healed entirely, and she slept much better. The chilly sensations ceased entirely while she was taking the quinine. Her physical improvement too, was quite marked for two months. The skin began to scale somewhat when the quinine was discontinued, but only in small areas, and hardly noticeable compared to her condition when she entered the hospital. Then she began to get weaker, all medicine produced nausea, and ulcerations reappeared, and she died a month later.

The fifth patient was a patient of Dr. M. F. Engman's, to whom I am indebted for the privilege of reporting. F. L., aged fifty-four, was suffering from an erythematous, scaling condition of his entire body. The eruption began in the latter part of September on the inner surfaces of the thighs, as itchy papules. Within a week the entire surface of the body became red, and covered with fine scales, becoming an exfoliating dermatitis. For some weeks before the eruption appeared, the patient suffered from chills and fever, followed by sweats and pains in the bones. Examination of the blood showed the presence of malarial parasites, and he was given calomel and quinine, and a one per cent. ichthyol ointment for local application. The eruption almost entirely disappeared in ten days, the skin was normal in color, except on hands where it was bluish red. He was given capsules containing arsenic, quinine, and strychnine, and did not return. He was seen several times later, and reported that he suffered no relapse of his skin affection.

The sixth patient, J. B., entered the St. Louis Skin and Cancer Hospital August 13, 1907, service of Dr. J. B. Keber, suffering from an universal exfoliating dermatitis. He was a laborer, forty years of age, and the present skin condition had been present one month. He had suffered numerous attacks of psoriasis. He was in good physical condition, no visceral lesions being found. The entire skin surface was livid red in color, and covered with greasy yellowish, large and small scales. The exfoliation was very profuse, and he suffered from occasional chilly sensations. The dense collection of greasy, yellowish scales on the scalp suggested seborrhœic eczema, and he was treated with sulphur-salicylic acid, and tar ointments for two weeks, with no improvement in the condition. Frequent urinalysis showed absence of albumin, sugar, and indican, and an average sp. gr. 1012.

Examination of blood, by Dr. G. McConnell showed,

Hæmoglobin .....	85%
Erythrocytes .....	4,704,000
Leucocytes .....	20,000
Polumorphonuclear leucocytes .....	69.6%
Large lymphocytes.....	11.6%
Small lymphocytes.....	15.6%
Transitional .....	3.2%
No eosinophiles found.	

He was given quinine sulphate, forty-five to fifty grains daily, and a daily starch and soda bath. Within a few days the scaling became much lessened, and the erythema much paler. Two weeks later the eruption had broken up into discrete, sharply defined, erythematous patches, slightly elevated, and now covered with silvery scales, with large areas of perfectly normal skin intervening. Within another week the eruption had developed into a typical psoriasis, which showed no further improvement under the continued large doses of quinine, and it was stopped. Ungt. Dreuw was then applied, and the lesions improved very rapidly for two weeks, when a mild chrysarobin dermatitis began to develop, and the ointment was discontinued. His skin became universally red again, with some scaling, but rapidly broke up into the psoriasis patches, under the soothing ointment, much less pronounced than formerly. Patient refused further treatment, and was lost from observation, suffering when he left from a rather typical psoriasis.

In reporting the series of cases treated with quinine empirically, not even based on a scientific theory, nor a satisfactory explanation of the results, the bare facts of the clinical observations are given.\* In looking over the literature on the subject, I was gratified to find that J. F. Payne, in an article "On Persistent Erythema and its Treatment," *Brit. Jour. Derm.*, May, 1894, reports a series of cases of several varieties of erythema, in which he used quinine sulphate with rather remarkable results. He concluded from his observations on erythema that quinine was useless unless given in large doses, and offers no reason for its use.

In all of the cases embodied in this report the drug was given in large doses, and the tolerance in all of them was very striking. The urine was examined weekly, and no untoward indications, such as hæmaturia or albuminuria were observed, even when the dose ran as high as, in the third case (pityriasis rubra), eighty to eighty-five grains was given during a period of twelve hours. In these



cases no attention was paid to slight deafness, and the dose was only reduced when the tinnitus aurium was quite pronounced.

The effect in all was noticed in a few days, and it would be difficult indeed, to explain such rapid subsidence of exfoliation of the skin, the reduction of erythema, and œdema, when present. The slight relapse of the skin condition in the third patient when the dose was reduced from sixty to twenty grains a day, and the rapid improvement following an increase in the dose, was significant of the fact that results could only be obtained with large doses.

\* Cushney in his chapter on quinine states:

"Perhaps the lessened formation of uric acid, and other poisonous products, may be suggested as a possible cause of the improvement when given in neuralgia and headaches.

Alteration in tissue change occurs throughout the mammalia, and consists in a marked diminution in the destruction of the nitrogenous constituents of the tissues. After administering quinine the nitrogen is at first augmented for a few hours, and then diminished to a considerable extent, due to a restricted production of all the nitrogenous constituents of the urine, but especially of the urea and uric acid.

Phosphates and sulphates undergo a corresponding alteration, but all metabolic changes are not affected, for the carbonic acid exhaled, and the oxygen absorbed present no alteration in amount, so that the oxidation of the tissues cannot be said to be altered, but only the breaking down of the nitrogenous bodies.

Nitrogenous food is not dissipated so rapidly, but is stored up in some unknown form under quinine."—*Textbook of Pharmacology and Therapeutics*. ARTHUR R. CUSHNEY, 1906.

## SOCIETY TRANSACTIONS.

### THE NEW YORK DERMATOLOGICAL SOCIETY.

Regular Meeting, April 28, 1908.

Dr. MORROW, in the Chair.

#### Case of Psoriasis of the Palms. Presented by Dr. DADE.

This patient for the past two years or more has had these lesions on the palms, and no lesions elsewhere on the body until within the last two months, when a spot appeared on both elbows. These elbow and palmar lesions are the only manifestations of the diseases to be discovered, and the case may be said to be, or, at least, have been up to the time the elbow lesions appeared, one of the rare instances of psoriasis occurring on the palms alone.

Dr. FORDYCE said that two years ago he had presented a case of psoriasis of the palms where the lesions were more diffuse and also appeared on the backs of the hands. The attack cleared up under tar treatment, but later recurred. The diagnosis was confirmed by the subsequent development of lesions on other parts of the body.

#### A Case of Scleroderma. Presented by Dr. JACKSON.

The patient is a girl 3 years old. There is a history of two miscarriages by the mother before the birth of this child, and of two afterwards. There is nothing special in the history of the child excepting an obstinate diarrhœa last summer. The disease began suddenly in June, 1907, and is said to have undergone no change since then. It takes the form of a characteristic band about two inches wide that runs from a little below the groin down to the heel on the inner side of the right leg. The band is broken for a space just below the knee.

The diagnosis was accepted without dissent.

Dr. FORDYCE agreed with the diagnosis, but said that he had never before seen a case in so young a child.

#### Case of Lupus Erythematosus of Mucous Membrane of Lip. Presented by Dr. DADE.

The patient is the one presented to the Society several times already, having been treated eight years ago with liquid air. There has been, as you see, no return of the disease on the face where treated, and he now comes back for the lip lesion which has developed, he says, within the last four months. I shall apply liquid air to the lip and hope to get as good a result as the face shows, then present him to you again next month for inspection.

**Case of Lupus Erythematosus.** Presented by Dr. WHITEHOUSE.

This case was of about three years' duration. The disease began underneath the eye on the right side of the face, in a man of about 30 years; another patch lower down developed almost simultaneously. Other lesions appeared through the scalp, and a year ago one developed on the lower lip near the left angle of the mouth. There is a general swelling of the lip, scaliness, and redness, in addition to which there is a circinate patch on the mucous surface of the lip near the left corner of mouth. The scarring is rather deep for lupus erythematosus. He intended to treat the case with liquid air, or perhaps liquid carbonic in the form of carbon dioxide snow.

Dr. SHERWELL agreed with the diagnosis, and spoke of a case to which he had referred on a previous occasion, in which the lupus had destroyed more than on the surface (Cazenave and Bielt), had attacked around the oral cavity and nose, and then went through the mouth, causing lesion of the same character all over pharynx and affecting the tonsils and going down into the larynx, and taking off a crescentic piece of the epiglottis. He followed the lesion with his glass as far as he could see it, down the trachea to the major bronchi, without the manifestation ever becoming lessened. The case was presented before the Laryngological Section of the Academy. It was a marvelous case in its way on account of its persistency and the equableness of its course. Nothing could stop it. At first it was thought to be tubercular lupus on account of the destruction of tissue, though the characteristic apple-jelly nodules were not much, if at all, in evidence. The case seemed to be of a mixed type, encroaching upon lupus vulgaris. The patient was a hearty girl and afterwards developed into a hearty plump woman. This case occurred twenty years ago, and was mentioned now as an instance of how the lesion sometimes extends through the mucous membrane as well as the cutis, and yet no evidences of general tuberculosis were ever discovered.

**Case of Lupus Erythematosus of the Nodular Type.** Presented by Dr. FORDYCE.

M. McC., 24 years old, married five years; no children. Her mother died at the age of 54 of cancer; she did not remember her father. Her husband has had a cough since she married him; he is thin and drinks heavily. She thought he had tuberculosis; his mother died of that disease.

In the summer of 1907 numerous pea-sized to smaller lesions appeared over the upper portion of the chest, back, neck and arms, many of which disappeared spontaneously after six months. About the same time she developed purplish-red nodular lesions over the bridge of the nose, cheeks, forehead, back of the ears, neck, &c. At the present time she was in fairly good general health, but she coughed a good deal last winter. Her menstruation was slight; she has never been pregnant. A few dry rales could be heard over the upper portion of her chest. She complained of weak spells but never faints. Lately many new spots have appeared over the forehead and other portions of the face. These lesions were purplish-red, many did not scale at all and showed a marked infiltra-

tion. When they reached the size of a pea, the central depression could be made out. She had had the Calmette ophthalmic test on three different occasions without the slightest reaction.

The diagnosis was accepted without dissent. Dr. JACKSON said that these nodules seen by themselves without other lesions would be very difficult to diagnose.

Dr. WHITEHOUSE said that, aside from the nodular characteristics, the case was very like the first case which he had treated with iodoform, some 9 years ago, and which had recovered. His case had lesions on the forearms and chest similar to these, those on the chest having been brought out by the application of a capsicum plaster; they persisted for a year or two, but were superficial. The patient was treated by *lotio alba* for a long time, and then, after taking the iodoform, for a period they grew very much worse, later subsiding and dying away. The superficial type of lupus erythematosus responds to iodoform—given, one grain three times a day in pills. The stomach stands the remedy very well, and patients can take it for weeks at a time without ill effect.

#### Case of Urticaria Pigmentosa. Presented by Dr. JACKSON.

The patient is a girl about 22 months old. The disease is said to have begun about two months ago, when she was about 20 months old. At first, the mother stated, the lesions were like "hives," and itched. These did not disappear, but left behind yellowish, buff colored, or yellowish brown elevated, large pea-sized lesions. When these are rubbed some of them can be made to swell up and become red. The lesions are scattered sparsely over the trunk and limbs. The skin is not scratched, so it is not itchy at present. The child lives in a basement. Its general health seems to be fairly good. An elder sister is said to have had a similar eruption. When she was examined light brown stains were found, but no elevated lesions.

Dr. SHERWELL said that it might almost be the same baby as that of the illustration in Hyde's book, the similarity was so close.

Dr. TRIMBLE said that Dr. Fox had requested him to state that the case of the 13-year-old girl presented by him at the previous meeting of the Society had had a very careful examination and no evidence or history of scabies could be found. The pigmented lesions were more numerous and much more marked than in Dr. Jackson's case, presented to-night, but friction would not raise a wheal in any of the old lesions, and from the mother's statement the disease had lasted only one year.

Dr. JACKSON said that the condition was indeed a very rare one, and this was the first case he had seen at the College Clinic in twenty-seven years.

The child had a chronic diarrhœa last summer.

Dr. MORROW said there was no reason to question the diagnosis. The condition began when the child was 20 months old, without assignable cause. Many of the cases reported in the literature of the subject began after vaccination or some infantile disease. He has seen a number of cases characterized by factitious urticaria. He had endeavored to determine its presence or absence in this case, but the child was removed before it was time for the wheals to appear.



**A Case of Malingering.** Presented by Dr. JACKSON.

Miss G., æt. 22. Manicurist. The young woman seems to be in good health. Examination of her urine fails to show anything abnormal.

She states that the disease she now presents began about Christmas, 1907, as a scaling of her eyelids, and swelling of her face. These attacks of swelling and redness, with itching and some moisture have come on ever since at weekly intervals, and always at the end of the week. A well known dermatologist has treated her for some three months, but without success. She came to me April 6th, when she showed a little redness of the face, the skin not being much altered in appearance or feel. One week afterward there was a little swelling about the eyes. On Saturday, the 25th, she came again with more pronounced swelling of the face, and redness that ended abruptly at the hair line, and in a straight line just under the chin. I asked her what she used to make her face red. She showed no indignation at the question, but denied that she had done anything.

Dr. KLOTZ, without doubting the correctness of Dr. Jackson's diagnosis in this case, insisted that there exists a periodical erysipelas of a mild type, which repeats itself very frequently. He himself had suffered from something of this character for two winters when he was at college. It was restricted to the nose and cheeks. For a time it used to appear every other Sunday, especially if he wanted to go out. It was never accompanied by any general symptoms, and he felt perfectly well except for the general swelling of the face.

Dr. JACKSON said that he was convinced that the girl was malingering. She had been under the care of a very good dermatologist in this city, and had deceived him for months. She is a manicurist; lives with a sympathizing aunt, and probably gets up a dermatitis on Saturday night so that she will not have to go to work Monday morning. He had written her the night before, and told her that he hoped that her face would look bad this evening when she came before the society, and it did. He had asked her what she did to secure the effect, and she said 'nothing at all,' but did not seem angry at the question. She evidently had enjoyed herself very much in being the object of attention. She has talked about eczema, and wanted to know if there is not a discharge about her ear. The peculiarity about the case is the sharp edge of the inflammation along the hair line, and just below the line of the lower jaw.

**Case of Tuberculide.** Presented at the last meeting by Dr. FORDYCE.

Dr. Fordyce said it was a question at the last meeting whether the patient had syphilis or not. The Calmette ophthalmic reaction which was present in a marked degree when the patient was shown at that time had passed off under the use of cold compresses and installations of a ten per cent. solution of argyrol. The suppurating lymph nodes were still present in the neck, but were resolving slowly under applications of ichthyol and packing the sinuses with balsam of Peru. He now had an outbreak of fresh lesions which were pustular and very superficially situated. The

pus soon dried into crusts which were firmly adherent and when separated left a depressed scar. In addition to scattered lesions he had groups of papulo-pustules. The deeper scars which he had over the body, patient stated resulted from lesions which were exactly like those which he at present presented.

Dr. BULKLEY said that he could see nothing at all of a syphilitic nature. All of the scars might be made by a tuberculide.

Dr. KLOTZ said that in December, 1907, the patient had different lesions, which disappeared under specific treatment by injections. The scars on the tattooed parts of the arms differed from the deep-seated ones on the back and face. The new lesions now present are like those which continued to appear under the syphilitic treatment. The case was originally suspected to be small-pox, and was several times inspected by the Board of Health.

Dr. FORDYCE said that a careful search had been made for evidence of syphilis and a history of that infection, but neither could be found. He was more convinced than ever that the scars and lesions on the patient's body were a tuberculide and not syphilis.

#### Xeroderma Pigmentosum. Presented by Dr. Fox.

The patient is 27 years of age, of Irish parentage. For the past two years he has worked in the Brooklyn Navy Yard. There has been no disease like the present one in any member of his family. As a boy his face and hands were covered with freckles. These disappeared from his face when he was about 17 and have not reappeared since then in this region. Two years ago he first noticed the lesion in the middle of his left cheek which is now ulcerating. The red patches on the face have existed for a number of years, and the scaly lesions of the face for the past year. The patient presents on the face telangiectases and atrophic spots. The general health is good. The eruption is similar to that of a patient from the Skin and Cancer Hospital shown on March 27, 1906.

Dr. FORDYCE saw little to justify the diagnosis of xeroderma pigmentosum. He looked upon the case as one of precancerous keratosis developing on a seborrhoic dermatitis with secondary epithelioma.

Dr. JOHNSTON stated his belief that the disease was a form of xeroderma pigmentosum.

The man was a seaman, exposed to the elements, and the condition might be attributed to his occupation. It is probably allied to sailor's skin.

Dr. SHERWELL said that he believed it to be as Dr. Fox had suggested, a case of xeroderma pigmentosum; also said that as they always had as sequel an epitheliomatous condition, it was analogous from that point of view to the so-called premycotic stage of mycosis fungoides, and hence might be called the first stage of epitheliomatous condition.

He was also much struck by the resemblance of this telangiectasic state to that often produced after the healing of an X-ray burn. He had seen several of this nature; one had been particularly striking. It was of a gentleman distinguished in a scientific way, who for some affection of the kidneys or bladder had been radiographed to ascertain as to whether or no a calculus was present. No apparent long exposure was made, but he developed a bad burn over the abdomen which took a long time to heal, and at points over these

telangiectases and evident areas of epitheliomatous degeneration occurred, which were cured by operative procedure, so far, a lapse of about eighteen months, without recurrence.

Dr. JOHNSTON said that the patient has three precancerous lesions on the back of the hand.

**Case for Diagnosis.** (Presented previously.) By Dr. Fox.

Dr. Fox said that he had presented this case a month or two since. The man was a Roumanian and had been in this country only a few months. When shown before he had some sharply defined patches on the abdomen, back, and thighs, running up in bands beneath the scrotum, but differing from eczema marginatum in being circumscribed instead of diffused as one might expect from the location. It was the general idea of the members then that the condition was that of tropical ringworm. A pathological examination had been made from a section removed from the back, and no parasite was found in the scales. Treatment with green soap had removed the intense itching of which the patient complained, leaving a simple pigmentation of the skin. The infiltration is lessened, although the skin is still somewhat thickened. The pigmentation is more marked than it was a month ago. There is considerable dermatitis in the vicinity. The patch on the abdomen is not as circumscribed as it was. There is a diffused condition where the sharply defined bands were at the time of the last meeting. The pathological report was that it was a small-celled inflammation, apparently what would be found in a chronic eczema, which was the diagnosis first made. It itched severely at first.

**Bromide Eruption.** Presented by Dr. FORDYCE.

The patient was a tailor, 26 years old, born in Russia. He was an epileptic and had been taking bromides for two years. He suffered from a fungating eruption of the lower extremity for eight months. It bore a striking resemblance to a serpigenous syphilide, as it presented central resolution with active lesions at the margin. These marginal lesions were elevated, fungating, quite painful and the seat of numerous miliary abscesses. Dr. Fordyce had observed lesions of this type on the lower extremities in a number of individuals who had taken bromides.

**Multiple Fibroma.** Presented by Dr. TRIMBLE.

The patient, a young man, aged 20, had a number of deep-seated small pea-sized tumors resembling lymphatic glands in a chain all over the upper part of his body, and a number of pigmented patches on his back. The patient noticed the first tumor in the right axilla 5 years ago. It was not a soft fibroma, but looks very much like what Von Recklinghausen described. There are two very large pigmented patches on his buttocks, and there were atrophic spots also. He had frequently seen the soft fibroma type, but this was the first time he had seen this variety.

Dr. FORDYCE said the case belonged to the group of cases designated as von Recklinghausen's disease. We had present here not only the tumors, but the café-au-lait pigment areas in the skin and atrophic lesions over the pectoral muscles, where tumors had evidently disappeared and produced these atrophic spots in the skin. The case presented by Dr. Trimble, however, differed from the ordinary one of molluscum fibrosum in that the growths were of the hard variety instead of the soft. Dr. Fordyce had observed that when the tumors were deeper-seated they were usually firmer in consistence than when projecting from the surface.

Dr. DADE thought it a typical case of Von Recklenhausen's disease.

### Case of Subcutaneous Abscesses from the Intramuscular Injections of Mercury. Presented by Dr. DADE.

Scattered over both buttocks are eight or ten cicatrices the size of a quarter of a dollar, pigmented and punched out with considerable induration beneath in the tissues. The patient presented himself to-day at the clinic, asking for some treatment that would not be so painful. He refused to return when he had received the injections on account of the pain they caused and subsequent ulcers. He is shown only as an evidence of what may occur in this method of treatment for syphilis.

Dr. WINFIELD said that the hardness of the tumors and their deep seat formed a very interesting case.

Dr. BULKLEY said that years ago when the use of hypodermic injections of morphine was new, a patient had been sent to him with hundreds of self-inflicted scars and indurations caused by the treatment. He had never seen anything of the kind, however, in connection with mercury injections.

Dr. Klotz said he thought it was due to injections of bichloride of mercury. He had seen such lesions repeatedly when the injections were made in the cutis itself—not making the injection deep enough. Such lesions are very slow in healing.

Dr. FORDYCE told of a case with hundreds of superficial scars, accompanied by a bluish discoloration. This patient, a woman, had used cocaine.

Dr. WHITEHOUSE said that he had seen two cases of the type mentioned by Dr. Fordyce—one, a woman on the Island, in the Manhattan State Hospital for the Insane. The other had been presented before the Manhattan Dermatological Society. It was thought then that it was due to some chemical reaction between hydrochlorate of cocaine and the metallic needle. It was a permanent bluish tattoo, almost like the tattoo with india ink. Patients using only morphine escaped this trouble, but in both of these cases either cocaine alone was used or both cocaine and morphine.

Dr. MORROW said that many years ago, when this treatment was in its infancy and the technique was not so well understood as now, such conditions were very common. In 1887, when he was in Paris,—the first year insoluble preparations were generally introduced—the hypodermic injections were not made deep into the intramuscular tissue, and there were many cases of abscess and cicatricial scars very much like this. In a number of cases that had died from some intercurrent trouble, there were numerous nodules which were caused by the calomel. These were excised post-mortem, and were perfectly black, some the size of a filbert, and some the size of a walnut. There seemed to be a complete necrosis of tissue, but it was not broken down nor suppurating. He had seen no such condition for many years.



**Case of Papillomatous Syphilide.** Presented by Dr. SCHWARTZ.

The lesion was of two years' duration. The man had gonorrhœa a year ago, but there was no history of a previous rash on the body. It started on the right inner canthus of the eye and spread to the extent now seen, in a period of two years.

Dr. FORDYCE thought the case was a late syphilide, but would not rule out lupus absolutely. It had only existed for two years, but some cases of lupus have a rapid course and he would not eliminate this diagnosis without first subjecting the patient to the therapeutic test. He would very much like to see the case again after a month's treatment.

Drs. KLOTZ and BULKLEY agreed with the diagnosis of syphilis.

**Leprosy.** Presented by Dr. BULKLEY.

Dr. Bulkley presented a patient with leprosy exhibiting unusual characters. The manifestations of the disease were almost wholly confined to the lower extremities and forearms, and when shown at a former meeting the case had been regarded as one of multiple pigmenting sarcoma. Most of the lesions were small, less than an inch in diameter, generally oval, and slightly raised above the surface. They had, however, a soft pulpy feeling and were of a coppery brown color, other than that seen as pigmenting sarcoma. There was nothing about the face, nose or ears to suggest the diagnosis of leprosy. The history was as follows:

Ernest G.; Russian; age 26. Occupation, sailor. Family history, negative. Personal history, negative (pleurisy six years ago, erysipelas five months ago). First noticed small papules on legs two and a half years ago; six months later they appeared upon the thighs, and one year after first appearance patient noticed a few pin-head papules upon the arms and forearms. In the meantime some of the papules had increased in size, the majority having assumed their present appearance four months ago. His occupation has taken him to Norway and English ports. Has never been in the tropics.

Pathological Report. "Forearm." A small round nodular piece of tissue. Micro-sections show large masses of lymphoid and epitheloid cells with many large giant-cells; staining for bacteria shows the large giant-cells and many epitheloid cells to be crowded with leprosy bacilli. Diagnosis, leprosy.

Dr. JACKSON said that it was a most interesting case. He had never before seen one of just this type, most of the cases coming to New York being of the anæsthetic macular or mixed types.

Dr. DADE said that he had presented the case in January last for diagnosis, but at that time the patient had no lesions on the face whatever; they were confined solely to the extremities. The diagnosis of sarcomatosis then made was influenced by the microscopical findings.

Dr. WHITEHOUSE said that when he saw the case before it had the clinical features of sarcomatosis. He did not recall that there were any lesions on the face or trunk.

Dr. WINFIELD said that he had seen the case presented at another Dermatological Society before Dr. Kingsbury had made the microscopical report. A number of the men then thought it was sarcomatous. The patient then had not so many lesions on the body as he has to-night.

Dr. JOHNSTON said that the patient was first seen in Bellevue, and he then had no lesions on the body or face, but he had failed then to examine the nerve trunks, or he would not have been deceived. The histological specimens, unstained for bacilli, suggested lepra as little as the clinical picture. The lesion was mistaken for sarcomatosis.

Dr. FORDYCE said that the case had been brought to his office by Dr. Kingsbury, and he had no hesitation in making a diagnosis of leprosy from the clinical appearances of the lesion. In order to make the diagnosis absolutely certain, however, he had made a biopsy and demonstrated the presence of the lepra bacilli.

Dr. MORROW said that while he did not know what the objective appearance was when the case was presented before, he would not have the slightest hesitancy in making a diagnosis of leprosy at the first glance from the present appearance of the lesions. The nodules very often come out in more or less symmetrical groups, and they sometimes spontaneously disappear. He had seen a case where there were 200 or 300 nodules—a recent development—and under the influence of a change of climate, etc., and very simple treatment, the skin cleared up, but twelve months after there was another development, and the patient's condition was much worse than before. When in Molokai he had examined several hundred lepers, and in as many cases the lesions were practically confined to the lower limbs and the characteristic development about the brow and ears were entirely lacking. It is usual, where there is such a marked development of lesions on the lower limbs, to see them on the facial mask; but from the color, texture, and consistency of the lesions he would not hesitate for a moment in the diagnosis. There was no need to wait for a microscopic examination.

#### **Cornu Cutaneum on the Glans Penis.** Presented by Dr. KLOTZ.

Patient a man; 38 years of age. He had been under the doctor's treatment in 1893 for a very obstinate scaling condition of the glans which had previously existed for about 8 years, having appeared soon after an operation for phimosis, without any venereal infection. The affection healed after about 5 months during which various remedies had been applied.

During the years 1895 to 1897 the patient was under treatment for a very obstinately returning chronic gonorrhœa and urethritis. In April of 1896 the scaliness of the glans again became aggravated, but disappeared within a few weeks after treatment with an ointment of the white precipitate of mercury and oil of cade. During the following fall and winter the scaling returned again, but finally healed under applications of tumenol.

I did not see the patient professionally until April 5, 1908, when he exhibited a cornu cutaneum on the dorsal aspect of the glans penis; its formation had begun about one year previously. After growing for some time it had fallen off spontaneously; the present growth began about 8 months ago. The hope of the patient that it would come off again spon-

taneously had not been fulfilled, so he came to be relieved of it. The entire glans was somewhat swollen, and extremely sensitive to the touch; it was partly covered with thin, loosely adherent scales, except on the left side where the point of the horn had pressed against the surface and had caused an abrasion. As the patient was not willing to stop his work, an immediate removal of the growth was out of the question. I advised applications of a 1 per cent. solution of caustic potash around the base of the horn, besides an 2 per cent. resorcin ointment on the irritated surfaces.

When the patient came back on April 11th, the horn could be removed by moderate traction and with only very slight bleeding near the corona glandis. There remained a warty, rather hard surface, which under application of nitric acid and xeroform has been reduced to a smooth but still somewhat horny patch. This promises to disappear under this treatment. The horn measures  $\frac{3}{4}$  of an inch in length and  $\frac{1}{4}$  inch in width at the base, it shows a rather sharp, hook-like curve, so that over the convex surface it measures 2 inches, over the concave surface only 1 inch.

In this case the formation of the horn seems to be part of a keratosis which is restricted to the glans penis; the skin of the rest of the body does not exhibit any keratosis or ichthyosis whatever.

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### CHICAGO DERMATOLOGICAL SOCIETY.

April 24, 1908—Dr. JAMES NEVINS HYDE, Chairman.

**Case for Diagnosis.** Presented by Dr. O. S. ORMSBY.

Patient, a woman aged 37 years, had had a macular, scaling eruption involving the arms, forearms, face, scalp, neck, chest, and back, with a very few spots on the lower limbs, for four weeks. The lesions had been pink; at the time of presentation they were brownish; the palms and soles were exempt. The scalp lesions were crusted; in the scalp marked itching occurred. From time to time during the four weeks there had been periods of exacerbation and quiescence; the exanthem had never disappeared, however. There was one palpable gland in the suboccipital region; no sore throat; no mucous membrane lesions anywhere, and no general symptoms. Preceding the exanthem the patient suffered with what was called "grippe," for two weeks.

The diagnosis of syphilis was agreed to by the majority of the members present.

**A Case of Nail Growth.** Presented by Dr. ANTHONY.

A man, 35 years old, was scratched on the back of the hand by a cat; following infection of the scratch a severe cellulitis, involving the

forearm and arm, developed, necessitating a number of incisions for drainage. The infection had healed when the patient was presented to the society. In the *luna* of each nail of the affected extremity there was a new nail pushing the old nail outward.

**Three Cases of the Thin, Wide, Flat Finger Nails of Toxic Hyperhidrosis.** Presented by Dr. ANTHONY.

The first case was a girl, 10 years old, with tuberculosis of the cervical glands and of the radius. The hands were cold, clammy and moist. There was present an extreme degree of thin, wide, flat finger nails.

The second case was a boy, 8 years old, with tuberculosis of the hip, showing the same cold, clammy, moist hands, with less marked thin, wide, flat finger nails.

The third case was a boy, 6 years old, with nasal adenoids, intermittent sweating and asphyxia of the nose. The hands were cold, clammy, and moist; the finger nails were thin, wide, and flat.

Dr. Anthony stated that he looked upon Toxic Hyperhidrosis of the hands and occasionally of the feet as a combination of hyperhidrosis and asphyxia caused by toxins derived from distant *foci* of tuberculosis and chronic pus infections such as nasal adenoids (*The Acrodermatoses of Scrofula*, JOURN. CUT. DIS., 1907, p. 241). In this condition it is not uncommon to find the finger nails flat, wide, and thin, a deformity which is not congenital.

**Case of Acne.** Presented by Dr. W. A. PUSEY.

A very severe indurated acne with many comedones on the upper half of the abdomen and the lower third of the chest in a man whose occupation kept his clothes saturated with grease.

**Case of Leukoplakia of the Lower Lip.** Presented by Dr. E. A. FISCHKIN.

The patient was 60 years of age; no history of syphilis; smokes mild cigars; duration of the affection eight months. On the vermilion border of the right side of the lower lip, was a patch, the size of a bean, of cornified epithelium. The lesion was considerably thickened especially towards the median end, where it ended in a sharp line, giving the impression of a piece of white leather cut off with a knife. The patch was stiff, firmly adherent, and not exfoliating.

**Case of Tinea Sycosis.** Presented by Dr. W. A. PUSEY.

Man with tinea sycosis confined to an oblong circumscribed patch one and one-half inch long in diameter on the left cheek, resembling somewhat blastomycosis.



**Case of Lupus Erythematosus.** Presented by Dr. ORMSBY.

The patient was a man 45 years of age and the disorder of three months' duration. The eruption consisted of two dime-sized lesions, one on either side of the nose, and two smaller ones immediately beneath these. They presented erythematous margins with a beginning atrophic center; scaling was quite marked. The larger two had all the appearances of being produced by trauma from glasses.

The principal point of interest in connection with this case was the fact of the rapid development of the lesions.

**Case of Mycosis Fungoides.** Presented by Dr. L. PARDEE.

The patient was a widow, 55 years of age; family history negative. She had been in good health previous to two years ago, at which time an eruption began as a psoriasiform patch on the right elbow; when first noticed it was about the size of a quarter. Later smaller patches appeared on the left elbow and on the legs, especially below the knees. These patches caused intense itching and discomfort, extended peripherally; became boggy to the touch, and bled easily upon slight traumatism. When shown to the society a generalized, nearly symmetrical eruption was present resembling a dry eczema in character. It was located principally upon the arms, legs, and back. The edge of the eczematoid patches were rather sharply defined and areas of apparently normal skin appeared between them. In size the lesions varied from that of a quarter to larger areas including half of the back. Upon each forearm extending from the elbow downward, half way to the wrist, were boggy, deeply infiltrated areas, reddened and slightly scaly upon the surface. One of these showed a small area in which hæmorrhages had occurred following a slight trauma. Upon one breast beneath the nipple was a slightly fungoid area about the size of a dime. The entire eruption itched intensely, but had never shown signs of any oozing. The lesions were brownish red in color and were covered with fine scales.

The general condition of the patient was fair; she was able to be up and about, and other than the itching complained of nothing except a general muscular weakness which was shown in a tremor of the limbs and hands.

ERNEST L. McEWEN, M. D.,  
Reporter.

## MANHATTAN DERMATOLOGICAL SOCIETY.

65th Regular Meeting, January 10, 1908.

Dr. A. BLEIMAN, Presiding.

**Chancre of the Rectum.** By Dr. A. BLEIMAN.

M. C., fifteen years old, presented himself on January 10, 1908. with a fully developed universal maculo-papular syphilide, typical adenopathy and condylomata lata. Usual questions failed to bring forth the origin of the infection. Examination of the anus showed a suspicious tear along the posterior margin, which justified the exploration of the rectum. About an inch within the anal sphincter, on the posterior wall, is the typical indurated primary sclerosis. The patient then confessed to the practice of pederasty.

**Chancre of the Rectum.** By Dr. E. Pisko.

Martin W. W., seventeen years old, Austrian. Presented himself December 26, 1907, at the Harlem Hospital Dispensary (service of Dr. E. L. Cocks) with the following history: Three months ago noticed something growing around and within the rectum. The affected region felt sore all the time, soreness being more marked during and after defecation. One month later noticed that his lips became hard, and then cracked, and that his tongue pained him, especially while eating and during the night. Two weeks ago throat became sore and an ulcer, about 1 by  $\frac{1}{2}$  inches, formed on the side of the tongue.

Examination with rectal speculum revealed a lesion with indurated edges about one and one-half inches within the anal sphincter. From the anal margin to the tuber ischii the skin is studded with moist papules varying from pinhead to pea in size. On the tongue were several mucous patches and the lesion above described by the patient. One erosion on the edge of the soft palate and two on the posterior pharyngeal wall. Marked gingivitis and general adenopathy is present.

At first the patient offered no explanation for his infection. Later confessed to the practice of pederasty and buccal coitus.

**Chancre of the Rectum.** By Dr. E. Pisko.

Henry H., sixteen, American, clerk. Presented himself at the Harlem Hospital Dispensary (service of Dr. Cocks) on December 28, 1907, with complaint similar to the previous case; for two and one-half months he had moist vapules in the anal region, some tenderness and pain upon defecation. Examination at that time revealed an ulcer with indurated edges two inches within the sphincter, and a typical luetic angina.

Present condition: Scalp, axillæ and pubes shows a marked alopecia; tonsils show crateriform excavations with pseudomembraneous

coating; in the sulcus of the penis are two moist papules, two days' duration; recto-anal region studded with moist papules, pinhead to large pea in size; there is a general adenopathy; the right epitrochlear gland enlarged to the size of a hazel-nut.

The patient states that last fall he worked with a circus and was obliged to use the same toilet as was used by a man who was known to be sick. He absolutely denies any other source of his infection.

Both of the above patients were put on anti-syphilitic treatment January 31, 1908 (injections of salicylate of mercury), and all the lesions have cleared up.

DRS. COCKS and GOTTHEIL believed that extra-genital infections are more common than they formerly were. Dr. Cocks recalls nine cases of extra-genital sclerosis that are now at Randall's Island.

#### **Tuberculosis Cutis Verrucosa.** By Dr. W. S. GOTTHEIL.

Adolf H., twenty-seven, brassworker, has had his affection for six years. It began as a small warty excrescence, increasing in size very slowly. Though he has more or less trouble at all times from particles of brass, etc., getting into the crevices and irritating the lesion, it is especially painful in the cold weather, when cracks and fissures appear.

*Examination.* Patient is a slender, delicate-looking man; looks tubercular, though nothing definite can be found in the examination of his chest. On the outer dorsal aspect of his left hand, and extending from two inches above his knuckles down onto the little finger and to base of the right finger, is a sharply outlined but irregular and markedly verrucous lesion. Around the base of the entire lesion is a narrow margin of erythematous tissue, purplish-red in color. The warty excrescences are grayish to dark brown to black in color, insensitive, dry and hard, and readily removable, exposing a dark red papillary surface beneath. Deep rhagades traverse the warty growth, and contain some serum and pus.

Treatment proposed: Destruction or excision is contra-indicated on account of the location of the lesion. Actinotherapy (Finsen) would be most desirable, but the presenter has given up its use on account of its immoderate expensiveness both in time and money. Proposes to employ the X-ray. Cornell safety tube; holding this to be one of the few cases in which this treatment is indicated and allowable.

#### **Erythema Multiforme Tuberculatum and Acute Eczema.** By Dr. W. S. GOTTHEIL.

Robert S., forty-nine, single, referred to me with the following history: Three weeks ago "lumps" appeared; in the last few days has been using a salve, and has gotten worse. Examination shows the presence of perhaps twenty nodular lesions, mostly on face and neck, with a

few on the backs of forearms and hands. These lesions are purplish, fairly sharply limited, moderately elevated; vary in size from that of a large pea to that of a small nut, and are soft. Each one has been persistent since it appeared, then grow very slowly, and no new ones have appeared in the last few days. No other symptoms the first time the presenter saw the patient. He states, however, that he had felt feverish and had rheumatic pains when the nodules first appeared. The rest of the skin is free; no adenopathy; wears a double complete denture, and has some irritation of the palate and fauces, but nothing characteristic in the throat. On the face and neck is an acute papulo-vesicular eczema, probably due to the external application employed.

The opinion generally favored diagnosis of nodular syphilide. Epi-crisis: Under the exhibition of full doses of sodium salicylate and an indifferent application externally, the eczema promptly disappeared and the nodules flattened out and disappeared. By the middle of February, 1908, only stains were left. No further symptoms.

M. B. PAROUNAGIAN, M. D.,  
Secretary.

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## NEW YORK ACADEMY OF MEDICINE.

### Section on Dermatology

Stated meeting, held April 7, 1908.

Dr. A. R. ROBINSON in the chair.

### Two Cases of Telangiectases (Xeroderma Pigmentosum?). Presented by Dr. HOWARD FOX

The patients are sisters aged  $8\frac{1}{2}$  and 3 years old respectively. The parents are living and healthy. There are no brothers or sisters. The grandmother is said to have been a "bleeder" and the elder of the two girls is said to bleed very profusely from insignificant wounds. The older girl suffered from bronchitis as an infant and later from a slight attack of measles. She has always been pale but in apparent good health. At times she has complained of pain in the knee. Four years ago she first noticed an eruption upon the face. This was confined to the chin, nose, and cheeks. It began in the spring and disappeared almost entirely in the fall, some of the lesions on the chin persisting. The same phenomenon was repeated during the next three years. Two years ago the spots on the back of the hands were first noticed. Examination shows a considerable number of punctuate, linear and stellate telangiectases scattered about the chin, nose, cheeks, and backs of the hands and wrists. A few lesions are seen on the backs of the fingers and on the forehead. There



is a mild eczematous condition of the lips which has existed for several months.

The younger child first presented lesions of the cheeks a year ago. In her case the lesions have persisted during the winter. The lesions are few in number. On the back of the left hand are several diffuse telangiectatic areas a centimeter or less in diameter. There are also larger ill-defined areas on the wrist and back of the forearm. The child apparently enjoys perfect health. Her lips have lately become "chapped." The lesions presented by both children disappear upon firm pressure to appear rapidly when pressure is removed.

**Pityriasis Rubra Pilaris.** Presented by Dr. HOWARD FOX

The patient was presented before the New York Dermatological Society April 24, 1906, and before the Sixth International Congress of Dermatology as a case of Pityriasis Rubra of Hebra. At that time the eruption was universal. In the discussion that followed the diagnosis of pityriasis rubra pilaris was not suggested. The patient, a girl of 13, was born in Scotland and came to America when four years old. She suffered from scarlet fever when three years old. Eight years ago she first noticed an eruption upon the palms and later upon the face, trunk and extremities. This lasted six months and then disappeared entirely. It appeared again two years later and within a month had become universal.

It has improved several times since then, never clearing up any more than at present. The general health has always been fair.

Above the waist line the eruption is universal, the skin appearing bright red and scaly, although constantly softened with vaseline. The back is covered with medium sized "pie crust" flakes. The inner aspect of the thighs, popliteal spaces, and greater portions of the legs are free, though dotted with small islands of aggregated lesions or transverse bands. These lesions have a shiny aspect as in lichen planus, and a few single lesions are flat and umbilicated. On the dorsum of the middle phalanges are groups of plugged follicles.

**Xanthoma Tuberosum.** Presented by Dr. HOWARD FOX.

The patient is presented for contrast with a case of xanthoma tuberosum, associated with diabetes (reported in Trans. of Sixth Internat. Dermatolog. Congress), and now shown again here. He is 37 years old, born in U. S., a tailor. There is no history of any disease like the present in his family. A year ago he suffered from rheumatic pains in the muscles of the shoulders. He has had one attack of jaundice which lasted about a month. Eight months ago he first noticed an eruption upon the palmar surface of the left thumb. The eruption then spread upon the palm, and within two months had attained its maximum growth. It appeared later upon the elbows, buttocks, and eyelids. The lesions have

never caused any subjective symptoms or inconvenience whatever. The eruption consists of yellowish pin-head sized and larger tubercles, aggregated in patches upon the palms and elbows. The patches upon the palms follow the natural clefts in the skin. On the buttocks the lesions are discreet. The upper lids show typical lesions of xanthoma planum. The lesions are all distinctly yellowish, showing no admixture of red. They are firm and are not tender to the touch. The urine does not contain sugar or bile pigment. There is no jaundice of the skin or mucous membranes. The patient is well nourished and apparently enjoys good health.

#### DISCUSSION:

Dr. POLLITZER said that the degree of redness was of no aid in making a differential diagnosis between xanthoma tuberosum and xanthoma diabeticorum, because this feature shows all possible gradations between the extremes of the two types. Typical papules of xanthoma diabeticorum are so red, and contrast so strongly with the yellow apices, that they usually suggest pustules at the first glance. The lesions of the two diseases are the same in structure except for the slightly greater diffusion of the anatomical changes and slightly greater inflammatory reaction in xanthoma diabeticorum. In both diseases the nodules may come and go, and herein both differ from the so-called xanthoma planum, which in reality is in no way related to this disease, though both may occur in the same person. Diabetes presumably has nothing to do with the one of these cases in which it occurs, and the case is simply one of xanthoma tuberosum in a glycosuric.

Dr. ORLEMAN ROBINSON said that she had under her observation and treatment a case of xanthoma tuberosum multiplex in a child of two years in which there were about one thousand lesions, the majority of which exhibit a red periphery,—a yellowish hue only appearing upon pressure, and the redness rapidly reappearing upon removal of the pressure. Repeated urinary examination showed no traces of sugar. The lesions have now entirely disappeared, leaving a pigmentation in some places. She cited this merely to show that redder lesions were present in a non-diabetic case than in the case just shown.

Dr. LAPOWSKI said that he would like to hear reports of cases of xanthoma, giving full details of the condition of the various internal organs, with complete analysis of the urine, which might throw some light on the true nature of the disease.

Dr. ROBINSON said that he agreed with Dr. Lapowski that we must look to chemistry for further advance in knowledge of the etiology and pathology of xanthoma. He reported a case showing typical lesions of xanthoma diabeticorum, in which the urine was not found to contain sugar, though examined repeatedly during six months. Some time later, however, sugar appeared in the urine of this case. He did not believe there was any connection between the diabetes and the xanthoma in the case shown this evening, on account of the character and location of the lesions.

Dr. HOWARD FOX, closing the discussion, said that he had shown the case as one of xanthoma tuberosum coexisting with diabetes, but not as a case of xanthoma diabeticorum. The absence of tenderness and of subjective symptoms were opposed to the latter diagnosis. Furthermore, an anti-diabetic diet had no effect on the xanthoma lesions.

**Verruca Seborrhoeica.** Presented by Dr. ROBINSON.

The patient is a male 48 years of age. He has suffered lately from slight pruritus and lesions of urticaria factitia can be readily produced. The case is shown on account of the number of the lesions: there must be near one thousand and new ones are continually arising. Their appearance is that of the usual seborrhoeic wart. The majority are not larger in diameter than a pea. I have seen several cases in which these warts followed scratching of the skin on account of a pruritus probably the result of an endogenous toxæmia.

## DISCUSSION:

Dr. LAPOWSKI said that he could see no connection between the seborrhœa and the warts. He had seen cases in children showing five or six hundred flat warts on the hands and face, but without seborrhœa. In this case he would not connect the old pigmented lesions with the new ones.

Dr. POLLITZER said that the verrucæ planæ referred to by Dr. Lapowski was a different condition, being a multiplication of prickle cells, with prolongation downward of rete plugs; a hyperacanthoma without hyperkeratosis. He had seen a case similar to the one presented in an old woman, which was relieved of itching by the use of a resorcin and sulphur ointment.

**Pigmented Hairy Naevus.** Presented by Dr. TRIMBLE.

The patient is a girl of 18 years of age. Just under the chin, a little to the left of the middle line, was a lesion about the size of a five cent piece, black, and full of coarse black hairs. This has been treated with seven applications of liquid air. There remains now practically no scar, but only a very small pigmented spot, which can easily be removed with one more application.

**Pigmented Hairy Naevus.** Presented by Dr. TRIMBLE.

The patient is a girl, 19 years of age. To the right of the middle line of the chin, just below the angle of the mouth, was a lesion about the size of a ten cent piece, of the mouse skin variety. A peculiar feature of this case was that the center, about the size of a match head, protruded about one eighth of an inch above the surface, and was of a verrucous type. Four treatments with liquid air effected a cure, there being no pigmentation left and only a very inconspicuous cicatrix.

## DISCUSSION:

Dr. POLLITZER offered his congratulations on the excellent result obtained, but protested vigorously against this method of treatment. In these cases we are dealing with epidermic inclusions, and, what is worse, with pigmented inclusions. There is no guarantee that these cells are all destroyed by this method, and a scar is formed which holds any residual epidermic cells in its meshes, and in a certain proportion of cases carcinoma will surely develop. If the lesions are too large to excise, they should be left alone.

Dr. DANA HUBBARD said that he had been using liquid air for the past seven years, and in that time he had never seen epithelioma return after it had been pronounced cured by this method: neither had he seen carcinoma develop on a spot that had been treated by liquid air. This agent removes a large part of the diseased tissue, diminishing to that extent the liability to the development of carcinoma. Both liquid air and carbon dioxide snow are being daily used for the cure of carcinoma in all of its various manifestations.

Dr. TRIMBLE, closing the discussion, said that he had not seen any carcinomatous degeneration in hairy nævi, and that he thought this complication rather unlikely, and the danger not sufficient to stop the use of such a satisfactory method of treatment. Large nævi are not amenable to operative surgery, and the X-ray, trichloroacetic acid, and alcohol injections are not necessary.

**Tuberculosis Cutis treated with the X-ray.** Presented by Dr. CLARK.

The patient is a boy 8 years old, of Irish parentage. He has always been delicate. His family history is negative, except that a sister died at 1½ years of age following measles, and is said to have had sores on her exactly like those on this patient. Two years ago the patient had measles, and directly following the attack he noticed pimples which slowly developed into scabs covered sores forming around the wrists, elbows, ankles, knees, and the top of the feet. These sores have gradually increased in size up to the present time, and none of them have healed. They have not been especially painful and there is a tendency for thick heaped up scabs to form on them. The child's general health has been poor and he gives a mild positive reaction to the ophthalmo-tuberculin test with a ½% solution (Trudeau's). He catches cold easily, and has no energy or ambition, and is distinctly anæmic. The lesions are multiple, from one-half to one inch in size, irregularly circular in shape, and slightly raised above the surrounding surface. They are a dull red or bluish color, and covered in places with thick laminated adherent crusts, which when removed reveal small bleeding depressions and a surface that appears to have been formed by smaller and larger tubercles. The case is shown because of the unusual character of the tubercular lesions following measles and the effect that one X-ray exposure to some of the sores has produced as compared with various other points of treatment applied to some of the other sores. Exposures were just enough to produce a slight reaction, and surrounding inflammatory areola for a few days. This has resulted in a tendency to heal, which in most of them has gone on almost to completion. The elastic strap the boy is wearing around his neck was put there to demonstrate Bier's Stauungs Hyperæmie for tubercular glands of the neck, which the child has.

The patient is also taking iron and cod-liver oil and is kept out of doors as much as possible; and after the other sores have been X-rayed he will be sent to the country.

*(To be concluded)*



# REVIEW of DERMATOLOGY AND SYPHILIS

Under the charge of A. D. MEWBORN, M. D.

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## DISEASES OF THE HAIR AND NAILS.

By FRANK CROZER KNOWLES, M. D., Philadelphia.

**Etiology of Trichorrhexis Nodosa, A Note on the.** H. G. ADAMSON.  
(*Brit. Jour. Derm.*, 1907, p. 99.)

Adamson first describes the theories as to the causation of this condition; the original mechanical injury theory of Erasmus Wilson, the diplococcus of Raymond, and the bacillus of Hodara. He records the history of two marked cases of this disease under his care. Many of the hairs in these patients showed whitish nodes, at the intervals of a few inches; others, however, exhibited but one or two nodes to each hair. The following conclusions were drawn in the paper: That hairs which have undergone some nutritional disturbance, from a marked pityriasis, general malnutrition, an interference with the function of the papilla, from ringworm fungus, or the prolonged action of soap and water, may, upon mechanical injury, develop a node, which under the microscope is identical with that found in trichorrhexis nodosa. Therefore he considers the origin of the disease as a nutritional change in the hair, followed by an injury to the same.

**Alopecia Areata, A New Method of Treatment in.** J. J. McINERNEY.  
(*Brit. Med. Jour.*, Jan. 25, 1908.)

In a short note, a typical case of alopecia areata is described. The bald area is three inches in diameter, at the side of the occiput. A new treatment was inaugurated, consisting of painting the affected patch with a 20 per cent. solution of formaldehyde. This was continued daily until signs of inflammation appeared, then a sedative ointment was applied. Alternate stimulation with formaldehyde and soothing with a mild salve was continued for six months, at which time the hair started to reappear. The result was entirely successful in this case.

**Trichopathophobia.** A. D. MEWBORN. (*Jour. Amer. Med. Assoc.*, Jan. 4, 1908.)

Under this euphonious title, which simply means the "fear of disease of the hair," Mewborn has written an article describing every phase of the subject. He divides the paper into several headings: Worry over the loss of the hair, either partial or complete; worry over

the color or change in color of the same; worry over changes in the hair, such as brittleness, kinkiness, lack of luster, etc.; worry over excessive growth in unusual locations, and finally, failure of the hair to grow where it usually does. The constitutional and local conditions causing either an increased growth of the hair or a loss of the same are discussed. The effect of drugs taken internally or applied locally is mentioned. He describes in conclusion the curious effect that menstruation and pregnancy may have upon hypertrichosis, and also the various forms of alopecia.

**Trichonodosis.** J. M. H. MACLEOD. (*Brit. Jour. Derm.*, 1907, ix, 40.)

The condition had originated in a Cingalese girl, six years ago, at the age of seven. The hairs were dry, lustreless, deeply pigmented, curled up, with a nodular thickening near the end. The scalp was dry, but pityriasis and hyperkeratosis were absent. The hair was short, breaking off when it reached the shoulders. The tips of the hairs were atrophic, or frayed out. The ends split up into several pointed fibers, or were bent in a shape of a hook. The majority, however, were curled up at the ends, forming loops, consisting of a single knot or a slip-knot. A mild form of trichorrhexis nodosa was also present in some of the hairs. No pathogenic cause was discovered.

**Keratosi Follicularis Associated with Alopecia Areata.** MACLEOD and COLLINS. (*Brit. Jour. Derm.*, Jan., 1908.)

Three brothers, aged respectively nineteen, thirteen and ten years of age, were exhibited for the Dermatological Section of the Royal Academy of Medicine, on December 19, 1907. All three showed plugging of the hair follicles with horny spines over certain regions of the body, most marked, however, on the face, the scalp (two cases), back of the neck, and also on the extensor surface of the arms and buttocks. This same condition was noted wherever hair follicles existed, but in a much milder form. This follicular involvement led to a loss of the eyebrows and eyelashes in all of the cases, and to an almost complete baldness in two. There was also a mild ichthyosis present. The condition appeared in two of the brothers during the first year of life, and in the third before the end of the second.

**Trichorrhexis Nodosa.** ARTHUR WHITFIELD. (*Brit. Jour. Derm.*, 1907, p. 54.)

The patient, a medical student, was presented at the January meeting of the Dermatological Society of London. The condition was limited to the hairs, on the posterior surface, at the border of the scalp. The typical splitting of the hair fibers was seen under the microscope. The apparent cause was the trauma from using a strong solution of carbolic acid for pustular lesions on the back of the neck.

**Onychomycosis.** COLCOTT FOX. (*Brit. Jour. Derm.*, 1907, p. 240.)

The patient, a bus-driver, forty-five years of age, was presented at the June meeting of the London Dermatological Society. The condition had originally started fourteen years previously. All of the nails on both the hands and the feet were involved. Several typical patches, of short duration, were also noted on the dorsal surface of the hands. A coarse mycelium was readily found upon microscopic examination. Symmetric involvement of the nails was commented upon as being unusual in tinea.

**Pigmentation of the Nails in Secondary Syphilis.** VÖRNER. (*Münch. Med. Wochenschr.*, Dec. 10, 1907.)

Vörner records an interesting case, in which a man, of twenty-one years, after an uneventful period between the initial lesion and the secondaries, developed pigmentation of the nails at the appearance of the generalized eruption. The black spots appeared in the lunula of the finger nails, which became progressively larger from week to week. The deposit of pigment was not even or uniform. On the left hand, the fifth finger only showed this condition markedly.

**Alopecia, Frontal Band, as a Possible Sign of Exophthalmic Goitre and Associated Conditions.** DAVID WALSH. (*The Lancet*, London, 1907, p. 1080.)

The frontal band type of alopecia that is described in this paper, is situated over the frontal portion of the scalp, at the anterior margin of the normal head of hair. It stretches from one frontal eminence to the other. Walsh states, that it is congenital, hereditary, and is often found in several members of a family, but more frequently on the female side. The alopecia may be of the areata type, but usually a few scattered hairs may be found in the band. The entire involved area may be thinly covered with hair, or there may be a thin pencil of hair, on one or both sides, where normally the hairy scalp would have commenced. He has found it constantly associated with the symptoms of Graves' disease.

**Hypertrichosis Circumscriptum.** WILHELM LANDAU. (*Wiener klin. Wochenschr.*, 1907, p. 831.)

A very interesting case of local hypertrichosis is described by Landau in his paper. The patient was a female twenty-three years of age, of medium size, normal musculature, and with unusually elevated shoulders. The family and personal history were both negative. The patch was situated over the spinal column, in the median line of the back, it was twenty-two centimeters in length, and six centimeters in

width. The patch was sharply marginate, with pointed extremities, and reached from mid-way between the shoulders to the lumbar region. The hair hangs down from this area like a "pig-tail," it is soft and silky, and for the first twelve centimeters is dark-brown in color; being of a lighter shade than on the other hairy parts of the body. The hair is thickest on the median line of the patch and becomes progressively thinner as the border is approached. The hair converges towards the median line and is shaped like a comb over the spinous processes. The underlying skin is normal, pigmentation, a warty growth, or atrophy being absent. The scalp hair is thick, and that on the mons veneris is normal. The downy hairs on the general surface show no unusual development. Other cases of somewhat the same character, that have been reported by other authors, are mentioned. The supposed causes of this condition are also mentioned; such as some neurosis, local irritant, or various abnormalities in the development of the individual.

**Trichonodosis.** OTTO KREN. (*Wiener klin. Wochenschr.*, 1907, p. 916).

The source of the name "trichonodosis" is first referred to in the paper, due credit being given to the originator Galewski. Cases by other writers are then mentioned. Kren states that out of fifty-four women, who had skin disease, in whom a careful examination of the hair was made, in thirty-five nodes were found on the hairs. The site of the node is almost always the middle or the terminal portion of the hairs; exceptionally, however, they may be found on the hair near the scalp. These nodes are usually found upon the scalp hairs, but those of the body are not exempt. These small bodies on the hairs may be numerous or only a few may be present. Although the nodes may be seen by the unaided eye, the microscope is necessary to see the knots in the hair. Several varieties of knots are pictured in the paper.







DR. FRANK HUGH MONTGOMERY  
1862—1908

## OBITUARY.

Frank Hugh Montgomery, the son of Albertis and Mary Louise Montgomery, was born on the 6th of January, 1862, at Fairhaven, near St. Cloud, Minnesota. His early studies were conducted in the St. Cloud High School and in the University of Minnesota. He was graduated in medicine at Rush Medical College, Chicago, in the year 1888. His post-graduate work was conducted in the Johns Hopkins Medical School, and in the hospitals of Paris, London, and Vienna. On the 11th of January, 1897, he was married to Miss Caroline L. Williamson. Three children were born to them, all surviving.

At the time of his death, Dr. Montgomery was Associate Professor of Dermatology in Rush Medical College; Dermatologist to the Presbyterian, St. Elizabeth's, and St. Anthony de Padua Hospitals; and a member of the several national, State, and local medical societies. He was an active member of the American Dermatological Association, serving a term as Vice-President, and also as Secretary for three terms, during which period he edited the Transactions of that body (1900-1902). He also served as President of the Chicago Dermatological Society, taking an active part in all its meetings from the date of its organization.

His dermatological work, aside from the production of the several editions of the Treatise on Diseases of the Skin which bears his name, has been made known to his colleagues, both in this country and abroad, by his scientific articles, each of which bears the imprint of his scholarly labor and his thorough knowledge of the literature of dermatology in all languages.

Respecting the manner of his death, the name of Frank Hugh Montgomery will always be associated in the memory of dermatologists, with that of his heroic French colleague, Henri Feulard, who perished in a similarly futile effort to save the life of his daughter, in the conflagration at the Charity Bazaar of Paris in the year 1897.

Dr. Montgomery was an expert sailor and swimmer, but on the day of his death his young son, Hamilton, and, at her request and by permission of her husband for this excursion only, Mrs. Head, his stenographer, accompanied him for a sail on White Lake, Michigan, near which was the doctor's summer home. The light racing-skiff on which they had embarked, was overturned in a sudden gust of wind and the lady was precipitated into the lake on which they were sailing, drifting rapidly away from the overturned craft. Dr. Montgomery called to her that he was going to her rescue, flung off his canvas shoes, and plunged through the water. He never reached his companion, perishing on the surface of the lake in consequence of shock, possibly due to a

blow received on the head during the capsizing of his boat. Mrs. Head was drowned. His son, having been provided with a life-preserver before the embarkation, was rescued in safety.

Dr. Montgomery's death is a distinct loss to American dermatology. He was remarkable for his acuteness as a diagnostician, his skill as a pathologist and practitioner, and his extreme thoroughness in all that he attempted. He was a singularly modest man, sweet in disposition, clean in every act of his life, charming among his friends, and greatly beloved by all who constituted his *clientèle*.

Aside from his scientific work, his intimate friends enjoyed his intense fondness for music: he was a keen critic of the manner of production of its classical works. He loved wholesome out-of-door sports, was an enthusiastic mountain-climber, and a good golfer.

The circle of his social acquaintances knew him as a model husband, a devoted father and brother, and a faithful friend.



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## LYMPHANGIOMA TUBEROSUM MULTIPLEX.

M. L. HEIDINGSFELD, M. D., Cincinnati.

Presented to the Deutsche Naturforscher, Cologne, September 20-26,  
1908.

**K**APOSI has described a form of dermatologic affection, to which he gave the name of lymphangioma tuberosum multiplex, the clinical prototype of which, though by no means of frequent occurrence, has been often enough encountered and sufficiently well recognized to give it a well deserved place in dermatologic nosology. The lesions are conical or oval in outline, and vary from a pin-head to a pea or even larger in size. They are firmly imbedded in, and freely movable with the skin, covered with normal overlying epidermis, by which they are often so concealed that their presence is revealed only by touch, or when tension is exercised on the tissues in which they are imbedded. They are firm to the touch, insensitive to pressure, and possess a discrete, bilateral almost symmetrical distribution, and a somewhat crowded and indefinite grouping. The lesions, individually as regards their long axis, and collectively as regards their position to each other, show a marked tendency to arrange themselves in conformity to the lines of cleavage, and occasionally they are placed end to end to form an elongated patch. The lesions vary somewhat in color, from that of the normal skin to pink, yellow, sepia or reddish brown. Subjective symptoms are rarely associated.

• The anterior aspect of the chest, from the clavicles to the navel, and particularly the sternal area, is most commonly and constantly involved. The area over the sterno-clavicular junction is another site of predilection, although the sides of the thorax, back, and other portions of the body are occasionally involved. The lesions usually manifest themselves early in life, develop slowly, multiply steadily, and reach a relatively full development in early adult life. The older and larger lesions occasionally undergo a mild ulcerative inflammation, and spontaneous involution.

The pathologic clinical name lymphangioma tuberosum multiplex, which Kaposi has given to this affection, has proven to be ill-chosen, and inappropriate, and is worthy of adoption merely on the grounds of priority, and common usage. The pathology of this fairly constant clinical type of affection has been found to be exceedingly varied, and so closely akin at times to types of affection, so totally dissimilar and different in their physical and clinical characters, that a generic term of histologic import seems to be ungermane. Its pathology has been found to be identical at times with that already rather large class of cases which have been variously designated, under the names of multiple benign cystic epithelioma, etc., and with that very large and commonly encountered group, characterized by usually only one or two small glistening, pearly-white, depressed, button-like, isolated lesions of the face, with milia-like borders, as described by Hartzell.

To further accentuate the futility of establishing lymphangioma tuberosum multiplex upon a histo-pathologic basis and with the hope of shedding some additional light to those who are actively engaged in the thus far indefinite and indeterminate investigation as to the origin of these dermatologic new-growths from epithelial or endothelial tissue, and their derivation from epidermis, hair follicles, sweat glands, ducts, lymph- or blood-vessels, the writer wishes to report the following typical clinical case with an unusual and possibly unique histopathology:

A. H., negro, aged 26 years, born at Charlotte, N. C., the eighth child of seventeen children, the seven youngest of whom are all dead. Mother, father, four brothers and five sisters are all living and in the enjoyment of good health. Patient and his mother are the only members of the family, to the patient's knowledge, who have shown any trace of the affection.

The eruption consists of small rounded or oval lesions, pin-head to a pea or somewhat larger in size and normal in color, conforming in this respect to the rest of the skin, which in his case is the type of a  $\frac{3}{4}$  full-blooded negro. The lesions are firm to the touch, insensitive to pressure, imbedded in and freely movable with the epidermis. The epidermis conceals from view the vast majority of the lesions, but the latter are brought distinctly into view, if the intervening skin in which they are imbedded is placed upon the stretch. They are distributed for the most part over the anterior aspect of the chest, particularly over the sternum, and chiefly within a triangular area bounded by the nipples and umbilicus, wherein

several hundred lesions are closely and somewhat irregularly grouped. The long diameter of the lesion is usually placed transversely to the long axis of the body. They follow the lines of cleavage in their arrangement and distribution. A second area of closely grouped lesions is situated in the hollow at the base of the neck and over the sterno-clavicular junction. A single lesion is situated over the right and several over the left scapula, and a few lesions which have made their appearance during the past eighteen months are situated in the axillæ, and over the lateral aspects of the thorax. Eyelids, face, extremities, and lower portion of the trunk are free from lesions. The involved areas show a number of slightly depressed, pigmented cicatrices, which the patient states were the site of former lesions, which underwent a mild inflammatory ulceration and spontaneous involution. The affection has been present as long as patient can distinctly remember, but the lesions have steadily multiplied in number, increased in size, and enlarged in their extent. Patient has been entirely free from itching, pain, and other subjective or objective symptoms, save those already enumerated. Patient is married but without progeny, and the only other member of his numerous family similarly affected is his mother, who, according to the patient's statement, presents the same character of eruption, and with the same development, course, and distribution. The case came to my notice on February 14th, 1905, and has been under more or less constant personal observation the past three years, and during that time relatively little change has been noted in the appearance and development of the affection. Lesions were excised for histologic examination on February 14th and 28th, and December 1st, 1905, and form the basis of the following report:

#### PATHOLOGY.

The lesions are cysts situated in the derma at various levels, some in the lower depths close to the subcutaneous fat and considerably below the level of the lowest hair follicles. Those nearest to the epidermis are situated just beneath the pars papillaris, and the majority are placed between these levels in the unusually broad layer of cutis vera. The epidermis preserves its normal character, and sweat glands, ducts, hair follicles, and sebaceous glands are in all respects normally preserved and regularly distributed. The cysts for the most part are oval in outline, with the long axis slightly oblique to the surface perpendicular. The cysts are well imbedded in and encapsulated by a dense wall of connective tissue, and the wall is lined with usually one or more layers of well preserved epithelial

cells, with large oval nuclei, showing karyokinetic changes, with the innermost cells undergoing a rapid fatty degeneration. The cysts are filled with a soft cheesy-like mass of epithelial debris, and a large amount of small lanugo hair, richly distributed throughout the cheesy contents or concentrically coiled into dense locks. The contents of the cysts is soft and pliable in nature, and can be preserved in section only in the smallest cysts, the larger lesions containing mere remnants at some of the borders, and appear from loss of contents as large oval spaces, lined with several layers of epithelial cells. Cysts in various stages of development are present in all the specimens examined, and tissue removed for the examination of a single macroscopic lesion, contained an abundance of microscopic cysts, of the character already portrayed. The cysts preserve a uniform histological structure and character, and all the cysts contain an abundance of lanugo hair, whenever the contents can be preserved and is not mechanically dislodged in the process of sectioning, staining and mounting. The cysts bear a pathologic analogy to the dermoid cysts of the ovary, and judging from their deeply placed character, and from the absence of any recognizable relationship with the surrounding normal hair follicles, it must be inferred that they owe their origin to, and embryological derivation from, misplaced epithelial tissue of the epiblast. No other pathologic change of any moment could be recognized. There is no evidence of any interlacing epithelial strands, and colloid cysts, the pathologic prototype of this class of cases. Lymph- and blood-vessels are in all respects normal and are in no way involved in the pathologic process, and the epidermis, follicles and glandular elements are in all respects normal.

The consideration of this case must of necessity place a peculiar construction on our present knowledge and conception of the class of cases thus far considered under the general head of lymphangioma tuberosum multiplex and its various synonyms (syngo-cystoma, syngo-cystadenoma, hydradenome eruptif, hemangio-endothelioma, &c., &c.). The case is a well defined clinical example of a generally well recognized form of dermatologic affection, which received a clear and classical interpretation at the hands of the first to recognize and describe it, and from a relatively large number of investigators, who have followed him.

Its clinical prototype has been carefully enumerated by Kaposi, Jacquet and Dariér, Török, Quinquaud, Lesser and Beneke, Jarisch, Kromayer, Herxheimer, Thinn, Charles White, Crocker, Neumann, Brocq, and others. The plates which portray the clinical appearance



of Thimm's case, is almost a counterpart of its clinical aspects. The only unusual clinical features of the case, are its occurrence in a negro—the first instance on record to the personal knowledge of the author and the tendency inherited from the mother. The clinical observation that the cases of so-called multiple benign cystic epithelioma frequently inherit the tendency, and those of lymphangioma tuberosum multiplex rarely if ever inherited it, has been used as a point for the differential diagnosis and arbitrary separation of these, in some respects clinically and pathologically similar affections.

The histopathology of the case is doubtless unique and possesses but one prototype of somewhat doubtful similarity which was clinically diagnosed by Pollitzer as xanthoma tuberosum multiplex, and the histopathology revealed the lesions to be dermoid cysts. The unusual pathological character of the case recalls the cases of an osteoma cutis (one of which is in the author's experience), where laminated bone with all the characteristic elements, bone cells, Haversian canals, canaliculi, bone corpuscles, &c., are situated entirely in the cutis, independent of all other structures. This mesoblastic structure in purely epiblastic tissue, clearly demonstrates that some of these new-growths must take their origin from misplaced embryonic remains.

The histopathology of lymphangioma tuberosum multiplex is by no means of a uniform character, as evidenced not only by the variations in the descriptive reports, but also in the efforts of Török, Crocker, Unna, Blaschko, Neumann, Dohi, Gassmann, Fiocco, White and others on the one hand to seek an epithelial derivation from sweat glands, and a development from embryonic remains, with Kaposi, Elsching, Jarisch, Guth, Wolters, Waldheim, Alexander. Lesser and others who ascribe to the condition an endothelial character and a derivation from lymph- and blood-vessels. The striking similarity which the histopathology of this affection bears to that class of dermatologic affection described under the general name of multiple benign cystic epithelioma, or epithelioma adenoides cysticum, and some of its other synonyms, and to those not uncommon, small, often solitary, firm depressed button-like, disc-shaped lesions, yellowish white, glistening in appearance, and often studded with minute milia, shrouds it with no inconsiderable degree of obscurity. It seems that Kaposi, and those who followed in his wake, were particularly unfortunate to have attached a descriptive pathologic name to an affection which subsequent investigation has shown to possess an indefinite pathology, and one shared by widely different clinical types. In

this observation I must concur with Hartzell, that "neoplasms differing widely in origin (?) and nature may resemble one or another so closely histologically as to be indistinguishable, which is unlikely." It seems probable that there is an intimate and common relationship between these various affections, and possibly a larger group of cases, which thus far have a separate entity and nomenclature.

Their present-day distinction is clinical rather than pathological, and the pathological resemblance of the various groups for each other is more strikingly similar and uniform, than the pathologic traits of the individual cases for each other. Charles White calls attention to the utter confusion which exists between clinician and clinico-pathologist regarding the identity of these conditions, and pleads for a separation of the various types upon combined clinical and pathological grounds. In that event the case herewith reported must form an affection for itself. It seems more rational and simpler to regard these various affections as new-growths resulting from the developmental errors of embryonic remains, which partake at times the character of one or the other elements of the skin epidermis, gland lymph- or blood-vessel, &c., without specially influencing the clinical nature, character or subsequent course of the affection. The pathology may thus present a somewhat varied character, but the clinical type, lymphangioma tuberosum multiplex, adenoma sebaceum, multiple benign cystic epithelioma, or linear nævus remains constant.

The uncertain character of the pathology of the affection is well illustrated by Guth and Dohi. Both report the same case, and the one believes the lesions to be of unquestioned hæmangiomatous derivation, the epithelial strands incorporating red corpuscles and anastomosing with blood vessels; the other is firmly convinced that they are of epithelial origin, from misplaced ducts of sudoriferous glands.

Most of the authors who have investigated these cases are of the opinion that these new-growths owe their origin and development to misplaced embryonic remains, and attention has been called to this feature as a point of common resemblance between lymphangioma tuberosum multiplex, adenoma sebaceum, multiple benign cystic epithelioma, and linear nævi. The relationship of adenoma sebaceum with the nævi has been too generally observed to require further comment, but of particular interest is the observation of Francois-Danville that the association of vascular and pigmented nævi in the case syringo cystadenoma, originally reported by Jacquet fourteen

years prior, led him to class the affection with the nævi. The probable common embryonic development of these enumerated affections, together with other common clinical and pathological features, doubtless serve to establish a close relationship and an intricate differentiation. Nevertheless it is a matter of convenience to maintain the separate groups as they now exist, upon the most tenable clinical grounds. While exception can be taken to the nomenclature of these affections, it is probably wisest by reason of priority, long usage, and custom, and a varied clinical character, to leave it, with our present state of indeterminate knowledge, unchanged.

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#### DESCRIPTION OF PLATES.

Fig. 1.—Lymphangioma tuberosum multiplex. Lesions scattered for the most part of the abdomen and neck, multiply in number and spring into prominence when tension of the skin is exerted over the affected areas.

Fig. 2.—Lymphangioma tuberosum multiplex. Two microscopic cysts filled with debris and lanugo hair, situated in a mass of dense connective tissue in the lower layers of the cutis. The lesions are oval in outline, parallel and obliquely placed in close proximity to each other. Winkel, Oc. 2. Obj. 1.

Fig. 3.—Lymphangioma tuberosum multiplex. Cyst of the same character as those of Fig. 2, showing a thin dense wall, a lock of lanugo hair and other hairs on cross section, together with the dense character of the surrounding connective tissue. Oc. 1. Obj. 3.

Fig. 4.—Lymphangioma tuberosum multiplex. Lock of lanugo hair taken from one of the cysts strongly magnified, containing both cortical and medullary pigment and other characteristics of normal hair. Oc. 2. Obj. 5.





Fig. 1.

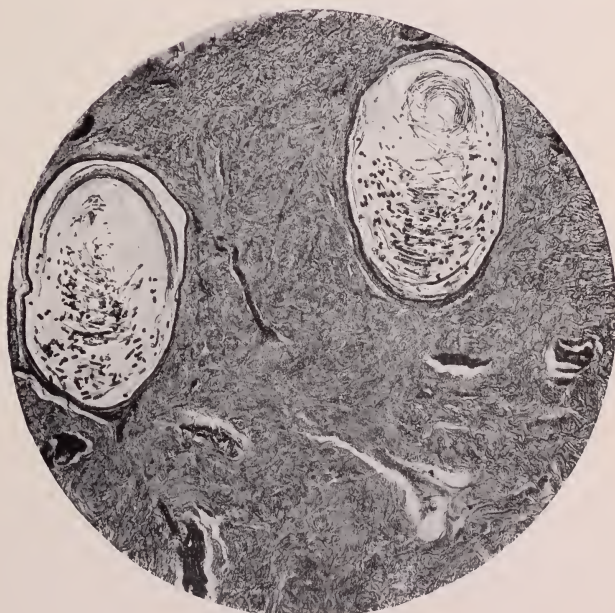


Fig. 2.





Fig. 3.

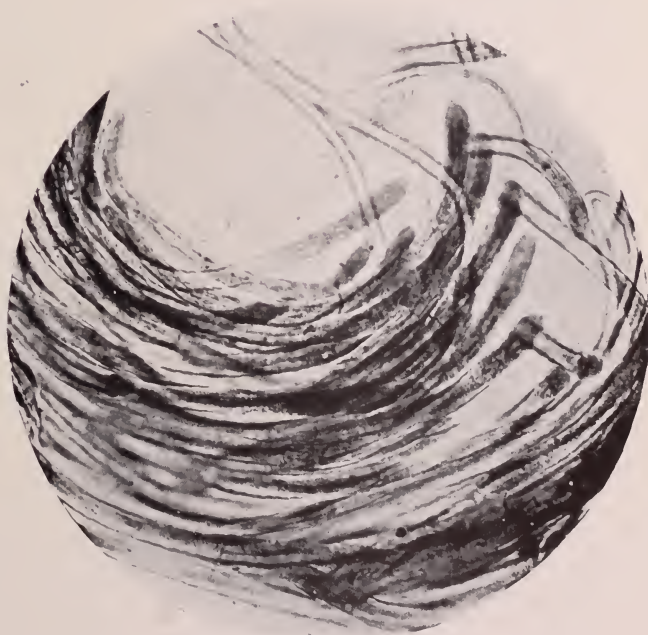


Fig. 4.





## OSTEOMA CUTIS

STOPFORD TAYLOR, M. D., and R. W. MACKENNA, M. A., M. D.,  
Physicians to the Liverpool Skin Hospital.

Deposits of bone are occasionally, though very rarely, found in the soft tissues of the body, and cases are on record in which osseous formations have been met with in the parotid gland, the lungs and even the brain. There is no case, however, on record either in the literature of the journals or in that which has found a more permanent abiding place in the text-books of a condition which we have ventured to designate as Osteoma Cutis.

### CASE.

H. C., Female, aged 15 months—Was brought to the Liverpool Skin Hospital in November, 1907. The child's family history was good. The father and mother were both living and healthy, though the mother had a slight degree of anæmia. There was no history of syphilis, alcoholism, rheumatism, rickets or other bone disease in the family, nor any stigma of nervous affections. The patient was the fifth child and the only girl in the family. During the latter half of her pregnancy with this child, the mother had several attacks of severe flooding, for which no cause could be ascertained. Apart from these hæmorrhages the mother's health during gestation was good, her food was ample, and her general hygienic surroundings were satisfactory. There was no history of "maternal impressions." Parturition occurred about three weeks before the appointed time. Labour was very prolonged, and delivery was instrumental.

At birth the child was puny and was not expected to live, but the mother suckled her and she throve so that when first seen by us she was of average size and weight. Up till that time she had had no illnesses. When she was about five months old, the mother noticed a faintly purple stain on the left thigh a little above the knee joint.

It was rectangular in shape and about one-third of an inch long and one-eighth of an inch broad. On feeling the spot the

mother observed that it was hard and gristly. Shortly afterwards she noticed two similar but smaller spots with the same characteristics on the anterior chest wall, about the level of the xiphoid cartilage. Since then the mother has noticed similar spots develop on other parts of the body.

*Status Præsens*—The following was the condition on the first visit of the child to the hospital:—On the outer side of the left thigh, just above the knee-joint there was a purplish patch of skin about one inch in length by three-quarters of an inch in breadth. On the surface of the discolored area there were several small pearly spots, each about the size of a millet seed. On palpation one felt a gristly plaque lying apparently in the deeper layers of the skin. The upper layer of the skin was firmly adherent and could not be moved on the plaque. The plate or plaque had well defined edges, and the surrounding tissues were normally soft. The plate was resilient and elastic, and could be bent by pressure, but regained its original shape as soon as the pressure was removed.

Below the knee, on the inner aspect of the right leg, were four minute purplish patches, the largest of which was not bigger than a split-pea. On palpation the same general characters were met with as in the larger plaques.

On the anterior chest wall, symmetrically on each side of the mid-line, and at a distance of an inch from it, at the level of the xiphoid were two smaller areas. That on the right side was the larger, being half an inch broad, while that on the left side was a quarter of an inch in diameter.

Over all, the skin was firmly adherent. Posteriorly over the left half of the thorax, at the level of the 8th, 9th, and 10th ribs, there was a number of shotty deposits, similar to those already described. On the left forearm there was a similar deposit, a short distance above the wrist. On the left half of the scalp, two inches above and slightly behind the ear, there was also a plaque, almost circular in contour and about half an inch in diameter. The face was free from deposits, as were also the mucous membranes of the mouth, the skin of the neck, the palms, the soles and the right arm. The child had six teeth and was bright and intelligent.

The size of the anterior fontanelle was normal for a child of fifteen months. There was no sign of rickets, syphilis or achondroplasia. Neither the father or mother nor any of the other children presented any abnormality.

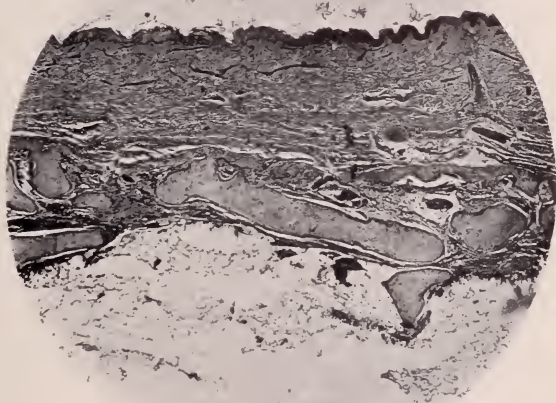


Fig. 1.

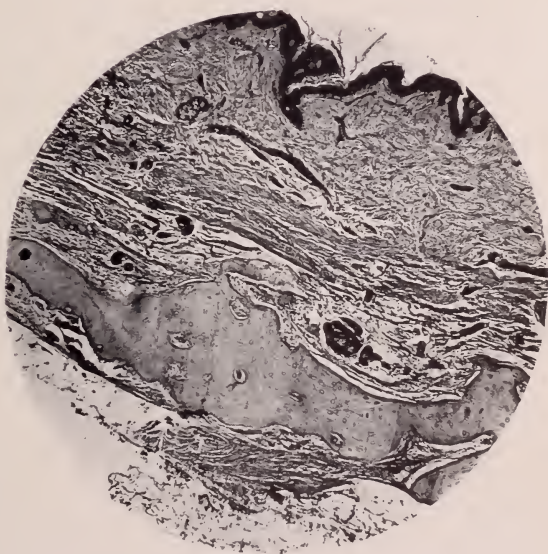


Fig. 2.





Under chloroform one of the plaques in the neighborhood of the xiphoid was removed for microscopical examination.

We are indebted to Dr. Frederick Wilson, Pathologist to the Hospital, for the following report:

PATHOLOGICAL REPORT.

"The specimen was decalcified and then embedded in paraffin. On microscopical examination the epidermis appeared normal. The papillary layer of the corium also was normal, but the reticular layer presented a loose rarified appearance, due possibly to some extent to the preparation of the specimen. In the lower part of this layer and projecting into the subcutaneous tissues were several plates of bone. These plates were irregular in size and shape and whilst for the most part were clearly differentiated from the surrounding tissues, here and there seemed to fuse with the connective tissue fibres. At these points the connective tissue fibres appeared swollen and blurred in outline and became more and more indistinct as they fused with the newly formed bone. Amongst these fibres were to be seen large cells, for the most part oval in shape. These were probably osteoblasts. The above condition was also to be seen in several isolated patches.

In the immediate neighborhood the ordinary connective tissue cells were increased in number.

The edges of the completely ossified plates were covered with a membrane of fine fibres and flattened out cells. The plates themselves showed true bone cells, concentric lamination and Haversian canals. There was no sign of any cartilage in the tissue.

Sweat glands and rudimentary hair follicles were present in the corium, but no sebaceous glands.

Owing to the irregular growth of the plates, islands of connective tissue, with sweat glands were here and there surrounded and cut off. The condition was evidently due to the development of membrane, bone and the process was still in progress."

The conditions are well seen in the accompanying low and higher power micro-photographs. (Figs. 1 and 2.)

This is one of the most remarkable cases which has come under our notice. In his excellent work on Antenatal Pathology and Hygiene, Ballantyne makes no mention of any case of the kind, and we are forced to conclude that alike in the experience of the dermatologist, the obstetrician and the embryologist the con-

dition is unique. In all probability the condition depended upon some aberration of development during intra-uterine life.

Unfortunately, we were unable to follow out the history of the condition for long, and to observe whether the osseous plaques developed *pari passu* with the development of the child. For about a month after we first saw the patient she contracted measles, upon which broncho-pneumonia supervened with a fatal issue.

To our regret we were not informed of this till more than a month after the child's death, so that we had no opportunity of performing an autopsy, which would probably have materially increased our knowledge of this interesting case.

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## TREATMENT OF ELEPHANTIASIS WITH THE X-RAYS

BY WALTER BOOTH ADAMS, M. A., M. D., BEIRUT, SYRIA.

**E**LEPHANTIASIS is a relatively rare disease in Syria. I have only five cases recorded in a total of 10,000 cases, one in my private and four in public practice. This is rather remarkable when one considers our proximity to Egypt, where it is a fairly common disease, and the constant intercourse with that country. Thousands of Syrians sojourn in Egypt to better their circumstances and return to their native land, and hundreds of Egyptians come to Syria every summer to enjoy the cool and salubrious air of the Lebanon mountains. These to some extent bring the endemic diseases of Egypt to Syria, but not so extensively as one would suppose.

The case of Elephantiasis Arabum presented has three unusual points I wish to note. These are the high altitude of the home of the patient and its remoteness from the coast and contact with people from Egypt; the unusual place of the lesion, the eyelid; and the new method of treatment by the X-rays.

My patient, Saïdy, is a married woman of about 30 years of age, has three children and her former history and family history are good, except that she was troubled with a chronic eczema, which she had had with greater or less severity for several years.

About five years ago she noticed a small papule on the upper eyelid near the inner canthus, but as it did not give any troublesome sensations she thought little of it for some time till it got so large that it finally completely closed her eye. She applied various domestic measures and astringents with no relief. At length she

came to Beirut for treatment. Her home is some four days away, 5,000 feet above the sea and near the great grove of the cedars of Lebánon. Four operations were performed by a German oculist in Beirut, accompanied with many promises but no benefit whatever. At length discouraged, she came to the clinic of my colleague, Dr. Webster, professor of diseases of the eye, who referred her to my clinic with the diagnosis of elephantiasis and the recommendation to try electrolysis of the small papule growing on the left lid, feeling that it was useless to attempt anything on the entirely closed and greatly hypertrophied right lid. The case was peculiar, a woman with two good, sound eyes, yet with blindness threatening her. The tumor on the left lid was growing rapidly, more rapidly than the one on the right eye had grown.

Instead of electrolysis I decided to try what effect might be obtained by X-rays. It was a leap in the dark. The first sitting was given to the tumor on the left lid through a spectrum fitting over it and so protecting the rest of the face. Two sittings were given in a week and when she came for the third improvement was noted in a softening and slight shrinking of the tumor and wrinkling of the skin. After the third sitting great improvement was observed, so much that the patient was delighted. After five treatments the improvement and shrinking and softening were so marked that I decided to treat the other lid, which was not in on the original program. A mask of sheet lead was made, covering all the face except the right eyelid and the inner half of the left lid, which had the now shrunken tumor on it. It was thought best to give it treatment with the other lid.

After two sittings were given to the right eyelid the swelling went down so that she could open it, a narrow slit enough for her to see out of. Seven more ten-minute sittings were given and the tumor grew steadily smaller. A slight dermatitis was set up after the ninth and the sittings were reduced to four minutes, and later increased to five and then to six minutes. Altogether 29 sittings were given, 15 to the right eye previous to the second photograph, and eight more were given after it was taken. Improvement continued, but it was not convenient to get a second picture, nor was the patient able to remain longer for further treatment. Altogether 87 minutes of treatment was given to the right eyelid before the second photograph was taken. The patient promised to return if the tumor should begin to grow again.

The diagnosis of elephantiasis was confirmed by Dr. Nucho, our professor of microscopy, who made an evening visit to the patient and found the filaria in her blood.

The question is, How did the X-rays do this work? Did they kill the embryos in the lymph channels in the eyelids and then absorption take place? I can not say. All I can say is that Saïdy was practically blind in one eye and expected soon to be blind in both, and departed with perfect use of both eyes.

There remained much fibrous tissue in the lid and the temptation to use fibrolysin was great. In fact, shortly before I had read Castellani's paper on the use of fibrolysin in elephantiasis, I made one injection, but made no more, as I wished to get the benefit of the X-rays without any complicating or assisting factor, and decided to reserve the injections of fibrolysin till later.

So far as I can learn this is the first use of the X-rays to this disease. I wish to report this palliative treatment, for it is possible that more extensive lesions may be benefited by it, and if it be combined with the further treatment of compression and fibrolysin injections as detailed by Castellani in a recent number of *The Journal of Cutaneous Diseases*, much more may be accomplished with this hitherto very intractable disease.





Fig. 1.



Fig. 2.



## SOCIETY TRANSACTIONS.

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### THE NEW YORK DERMATOLOGICAL SOCIETY.

358th Regular Meeting, May 26, 1908.

The President, Dr. BRONSON, in the Chair.

**Tuberculosis Verrucosa and Lupus Vulgaris.** (Two cases). Presented by Dr. WHITEHOUSE.

Dr. WHITEHOUSE referred to the fact that at the November meeting he had presented a boy seven years of age suffering with disseminated lupus following measles. At that time some of the members thought it a case of tuberculosis verrucosa, but it seemed to be more of the lupus vulgaris type. It had existed for from one and a half to two years. He hoped to present the case again to-night to show the effect of treatment. The two present cases are shown believing they will be of interest in connection with the case above referred to. The man is 29 years of age, the boy 5. The man has tuberculosis verrucosia cutis following measles which he had when two years of age, and this condition has now existed for 27 years. The lesions are on the backs of the hands, the wrists, the forearms, buttocks, legs, and thighs. The most interesting lesion is on the foot extending to the sole. It is a typical case of tuberculosis verrucosa. The man himself is firmly convinced that the measles was the cause of this condition.

The boy has a patch of lupus vulgaris two inches in diameter and of two and a half years' duration, on the right cheek. He is the child of the man just presented, and the condition is regarded as an immediate inoculation from the tuberculous lesions of the father. The lesions on the backs of his hands have exuded pus between the warty outgrowths from time to time, and he admits that he has often wiped this away with his handkerchief, and that it was a common practice for him to blow the child's nose with this handkerchief. It was probably directly transmitted from the handkerchief to the child's cheek. While there is no history of any preceding skin affection of the cheek, it is not improbable that a simple chapped condition may have existed at the time of inoculation.

Dr. WHITEHOUSE said that it was only in that light that he presented the cases—the unusual condition of two types of lupus in the same family, with a possibility of the one being inoculated from the other. He had never before seen a transference of this kind, and wondered if it was plausible that it could

have taken place as the father admits, and that the soil may possibly determine the clinical type of the eruption.

**Case for Diagnosis.** Presented by Dr. SHERWELL.

Dr. Sherwell said that this case would probably be interesting in connection with the two presented by Dr. Whitehouse, as it seemed to be of the same nature.

Edward M., age 27. Came to clinic Jan. 27, '08, with a lesion of a papulo-pustular character (similar to those now existing, only more severe). The original lesion appeared on the wrist about 4 years ago. At that time the patient consulted his family doctor, but the condition became steadily worse for 16 months thereafter. At that time the characteristic lesions had spread to the eye, neck, and nose. After that time began treatment at the Skin and Cancer Hospital. Some of the lesions improved moderately, but, not being satisfied, he after that tried one or two physicians and then applied to Dr. Sherwell's clinic. The neck and occiput were then extremely affected, also the nose, upper lip, and chin. The lesions on the back of the head and neck healed first and kindly under treatment with touching with acid nitrate of mercury in two months; the chin also was much improved, though taking a little longer time. The remaining lesions were more obstinate, but show great improvement during the last fortnight under increased vigor of treatment. The lesions have not been touched lately with the acid nitrate.

The condition seems to be similar to the cases described by Hyde and Montgomery, and is probably blastomycosis.

So far as known no microscopic observations have been taken by any one.

The patient has no luetic history. He is now being treated with white lotion, with a good deal of bichloride of mercury and salicylic acid.

DRS. DADE, JACKSON, FORDYCE, WINFIELD, and WHITEHOUSE concurred in regarding the case as a tubercular syphilide.

Dr. SHERWELL said that he did not think any of the members would have made such a diagnosis three or four months earlier. He was perfectly aware of the clinical appearance of the case at present, but the man had been under seven anti-syphilitic treatments without the slightest effect before he saw him, and later had been touched with nitrate many times, but did not respond to this treatment favorably. Under the present treatment the condition improved very rapidly, and besides he gave a clear history of a lesion of a similar character months before he had the lesion alluded to. He has had no other lesions of syphilis, no primary eruption, no falling of the hair, no headaches, nothing of the ordinary subjective or objective symptoms, excepting the ulcerative process. There has been no glandular affection. He has been a nuisance on account of his loathsomeness, but the condition while under treatment and the condition of the surface did not seem to be syphilis. He has a scar on the male organ, but no glandular affection. It has a most peculiar ulcerative surface, no hard borders like a breaking-down syphilis. He could not say definitely yet whether or not it was a blastomycosis, but he thought it probable. When the man first ap-



peared he made a tentative diagnosis of tuberculosis verrucosa cutis, for it looked more like that than anything else, and so, for that matter, does blastomycosis, though he has not seen many cases of the latter. He had not yet sent a specimen for microscopic examination, but had simply tried to cure the patient, and he certainly was much improved.

**Case for Diagnosis.** (A tuberculide?) Presented by Dr. DADÉ.

A generalized eruption of small papulo-pustular grouped lesions in the hair follicles, followed by minutes scars. The present trouble dates back four months, beginning with pain, headaches, fever, swelling and disability of the knees. At that time he was in the hospital for this joint trouble. The eruption is but slightly itchy. Abdomen is comparatively free—the face, back and limbs being well covered with the follicular eruption. He is still suffering some pain and swelling in the knees and ankles, for which he is receiving treatment. There are no lung symptoms. Patient has lost 35 pounds.

Dr. FORDYCE said he believed it to be a tuberculide. Objectively, it was a follicular inflammation leaving scars. Some of the grouped lesions over the trunk and arms suggested lichen scrofulosorum.

Dr. JACKSON said that he had seen the patient at his clinic in the afternoon, and believed it to be a tuberculide. Though resembling acne, it was too widespread for that disease, and, moreover, every lesion left a scar. It was an unusual case, and reminded him of the case Dr. Bronson had presented many years ago as one of acne cachecticorum. It seemed to him best to use the name tuberculide for all the cases reported under the designations of acnitis, folliclis, acne varioliformis, acne necrotisans and the like, our nomenclature being too voluminous.

Dr. WHITEHOUSE regarded it as a fairly typical case, though he had seen none with such diffuse patches; he thought there was a secondary dermatitis associated with it. The eruptions are distinctly follicular and leave scars. It belongs to the tuberculide type, but suggests lichen scrofulosum in many respects.

Dr. WINFIELD agreed that it belonged to the tubercular group, and suggested that the condition on the arms might be due to something that had been applied to it.

Dr. SHERWELL said that if the case had been seen in the old clinic of Hebra he thinks it would have undoubtedly been called lichen scrofulosum.

Dr. BRONSON said that he was not entirely satisfied with the term lichen scrofulosum as applied to this case. It seemed to lack some of the evidences of keratosis that usually appertain to that disease. A name which he thought fitted it better was the old-fashioned one of acne cachecticorum. That the patient was cachectic did not admit of question.

**Lichen Planus.** Presented by Dr. DADÉ.

The patient was a man presenting lesions on the back of the hands, forearms and legs. When first seen at the clinic two days ago the bullæ were sufficiently pronounced, scattered over the more typical lichen planus patches of the legs, to confuse the picture to the extent of having to take the hands and arms into consideration for a conclusive diagnosis. No

bullæ show at present, only the crusts remaining where he has torn open the bullæ for relief of the intense itching.

Dr. JACKSON said that he had seen the patient on Saturday and his condition then was so bad that he at first thought it a case of bullous erythema. It is the first case of this kind that he had seen.

Dr. JOHNSTON suggested that the formation of bullæ might be due to the aspirin which the man said he had been taking.

Dr. BRONSON inquired whether it was not possible that the friction resulting from the itching might not cause the bullous eruption. It sometimes does in urticaria.

Dr. JOHNSTON replied that that was the way that Dr. Allen used to produce it.

Dr. DADE said that the suggestion that the bullæ might be caused by friction should be taken into consideration, but the patient states that "blisters" appear and that he scratches and tears them open to afford him relief from the itching.

#### Lichen Planus on One Side. Presented by Dr. JACKSON.

The patient was a woman of middle age. The case presented nothing of interest beyond the fact that the perfectly classic lesions were only on one hand and wrist.

Dr. KLOTZ said that it was a very unusual case, and Dr. DADE said that it was the first case of the kind he had ever seen. He had a case, though, where the sole situation of the lichen planus lesions was the glans penis.

#### Keloid Following a Burn with Milia Scattered over the Face. Presented by Dr. J. A. FORDYCE.

The patient was a woman, 30 years old, who was burned about the face one year before. As a result, she had on the right side of the face a linear keloid about  $3\frac{1}{2}$  inches long, projecting about  $\frac{1}{8}$  inch above the skin level. The entire surface of the face, which had evidently received a burn of the second degree, was now covered by great numbers of milia. These milia were similar to those met with secondary to pemphigus and other bullous affections of the skin.

#### Fibroma Mulloscum. Presented by Dr. TRIMBLE.

The patient was a woman with small tumors over the entire body, which began on the chest when she was 16 years old. The lesions were connective tissue growths, soft variety—a number of them bladder-like in character. The duration was now about 30 years. It was a beautiful example of this condition.

#### Tumor of the Leg for Diagnosis. Presented by Dr. J. A. FORDYCE.

The patient, about 30 years old, stated that he had had a wart or mole on the anterior surface of his leg ever since he could remember. About two years ago he bruised his leg accidentally and hæmorrhage took place under the skin, leaving a persistent area of pigmentation cov-

ering a large surface. The "mole" since that time had taken on increased growth and now was the size of a small walnut, hard to the touch, with a smooth surface and non-pigmented.

Dr. JOHNSTON said that the history did not seem clear. He did not think that the pigmentation was naevoid, nor did he think the growth an epithelioma. His idea was that it was a melanoma following a pigmented mole.

Dr. WHITEHOUSE said that clinically he would diagnose the case as a degenerated mole. Only a microscopic examination could determine whether it was a melanoma or sarcoma.

#### Erythematous Lupus Cured by Liquid Air. Presented by Dr. DADE.

Dr. Dade said that he presented this case merely to show the result of treatment with the liquid air as compared with curetting. The patch on the left cheek was curetted some year and a half ago by a strong advocate of this method. The patient says that the process was so painful that she would not submit to having the patches on the right side so treated, besides it took three months before the wounds made by the curette had healed and a keloid scar resulted. Liquid air was applied to the right side patches at her request, and in two weeks the crusts had fallen, leaving the smooth white surface. The cosmetic result speaks for itself.

Dr. JACKSON said that he did not remember having seen these lesions on the arms and back before when he saw her at his clinic. He thought there was little doubt as to the superiority of liquid air treatment over curettage in this case. In fact, he had had the misfortune to produce hypertrophied scars in one case of acne in which he had used the curette, and was not enthusiastic about its use.

Dr. WHITEHOUSE said that the scars were good by both treatments, but perhaps better from the liquid air. He wondered whether the history of the lesions on the back would account for the swollen condition of the scars. The patient had spoken of these as being sore at times. Perhaps the pressure on the back produced the hypertrophic condition displayed by these scars.

Dr. DADE said that the patient stated that these scars would at times swell up, then subside. He did not think them the same process. The difference between the two sides of the face was only that one side presented a keloid and the other did not.

#### Epithelioma of the Tongue Healed by X-ray Treatment. Presented by Dr. TRIMBLE.

Dr. Trimble said that he presented this patient from Dr. Fordyce's Clinic, to see whether any of the members had had a similar experience. The patient presented himself with a growth about the size of a lima bean on the left side of the tongue about two-thirds back from the tip. It was fungating and had much induration about it. The clinical diagnosis was epithelioma, although it had existed, so the patient said, for only three months. He was put on X-ray treatment as a temporary measure, although he had not known this to be used on the mucous mem-



brane of the mouth. The patient had two exposures before Dr. Fordyce saw him, and there seemed to be some improvement. At first he had exposures of two minutes; now he has had twenty exposures—the first two or three of less than five minutes, the others of about five minutes. They were given twice a week. The lesion has now healed up pretty well, and there is only a small white spot remaining. Dr. Trimble said that he thought the lesion must have existed for more than three months, though the patient says that that was the time he first noticed it. He wished to know whether the members of the society thought it justifiable to treat the case in this way instead of surgically. The man, however, had absolutely refused surgical treatment.

Dr. WINFIELD said that in the beginning of the X-ray treatment it was common to use the ray on all the mucous surfaces, but the results were so uniformly bad that now it is the general opinion that it is not wise to use it on any of the mucous surfaces. He had used it on a case of epithelioma of the tonsil for six months, and the patient continued to grow worse until he died. He had also a case of epithelioma of the tongue, a very small nodule, and used the X-ray—the patient refusing any other treatment—but the patient died. In fact, the X-ray seemed to aggravate the condition. This had also been the experience with a number of other cases. Dr. Trimble's case certainly shows a wonderful result for so few exposures and such short ones.

Dr. FORDYCE said if any of these tongue epitheliomas could be cured by X-ray treatment it was certainly a great advance over the treatment by surgical methods. The majority of patients operated on for cancer of the tongue either died within a short time as a result of the operation or from recurrence of the original lesion. He was afraid, however, that X-ray treatment of epithelioma of the tongue would only very exceptionally result in benefit or a cure.

Dr. TRIMBLE said that he was prompted to try this treatment on account of having recently cured a rodent ulcer affecting the upper and lower lips. Dr. Fordyce had presented the case earlier in the season. Up to the time when this patient was put under X-ray treatment his opinion had been the same as that of Dr. Winfield, and he had not thought the X-rays were of much benefit on lesions of the mucous membranes. The question now is whether or not the diagnosis was correct. The ulceration was almost the size of a man's thumb nail.

The only surgical procedure would have been the removal of the tongue, and that the man absolutely refused to permit. If all such lesions would heal as readily as this one has done, it would certainly be much better than the removal of the tongue, for, as Dr. Fordyce says, they recur very frequently.

Dr. JACKSON inquired whether any of the members had used the Cornell tube. He thought it would be excellent for a case of this kind, as it could be put right against the lesion. It was claimed for it that there was no possibility of causing a burn. In one case where he had recently used it, there were two small superficial epitheliomas, which, to his surprise, promptly healed under three exposures, and there is now no sign of the trouble. The tube is placed in direct contact with the skin. The interrupter should be turned so that the current is broken much more slowly than while using the ordinary tube, as this tube is delicate, and intense currents are prone to break it.

Dr. JOHNSTON said that exposures with the Cornell tube had cured a rodent ulcer the size of a silver dollar in the inner canthus of a patient in two months or less, the sittings occupying not more than five minutes, once a week.

Dr. JACKSON said that where possible, operative procedures were the best.



The use of the X-ray took many sittings to accomplish a result that could be reached in a few minutes by the curette and caustics. It was useful specially in superficial and in inoperative cases, or where the patient preferred giving the time and paying the money to the pain and the disfiguring crust left by the operation.

Dr. SHERWELL said that he had seen one or two cases where the X-ray had been applied as far as possible directly in the mouth without the slightest effect. He had two cases now in mind, one of them very bad, one of epithelioma at the base of the tongue, in which the X-ray had been used persistently without effect. It had been tried as offering a possibility of relief. The patient had had at first strong anti-syphilitic treatment to exclude the possibility of syphilis, and then the X-ray, administered by a very experienced man. He had never seen any good effect from X-ray treatment upon sarcoma or epithelioma or carcinoma on the mucous membrane in the mouth or throat or nose, nor indeed had he seen anything else do any good when deep seated. Operative interference, too, seems always fatal. One patient had the jaw severed at symphysis, the bones inverted, tongue removed entire, with affected or suspected adjacent tissues and glands, and without effect—a tremendous but good operation, but the man died. In another case of sarcoma the man died after the same operation.

He agreed with Dr. Morrow's remarks with regard to the removal of circumscribed tumors by direct methods, believing in their superior efficiency, economy of time, money, mental distress and many other reasons.

Case of Disseminated Lupus Following Measles. Presented by Dr. WHITEHOUSE.

This patient was first presented at the November meeting, the lesions following measles a year and a half ago. One side was treated with a 20% plaster of salicylic acid and creosote and the other side with the X-ray. Most of the lesions have improved to about the same degree by both forms of treatment. Bier's hyperæmic treatment has been employed by means of an elastic band around the neck, but it has apparently aggravated the condition of the glands. As a result of the local treatment, however, there is a very great improvement. It was very difficult to treat the elbow, for the plaster would not remain in place.

Dr. WHITEHOUSE said that he did not think the measles was the sole causative factor, but a number of these cases have been reported, and it is presumed that there is a tubercular focus in the individuals which the measles in some manner disseminates. It is possible that other infectious diseases might do the same thing. It is infrequent because of the large number of children having measles, but few have tubercular foci.

Affection of the Nails. Hereditary Syphilis? Presented by Dr. WHITEHOUSE.

The patient is a young man of 19, in good general health, but suffering from trouble of the finger-nails since birth. The toe-nails have never been affected. His teeth were also very poor, and as far as can be learned never developed in a healthy manner. Four years ago they were all replaced by false ones. There has never been any other evidence of the disease. The young man works as a shipping clerk. He

is the youngest of five living children, having two brothers 30 and 28 years of age, and two sisters 22 and 21 years of age. The mother is living and well, with no history of miscarriages, but the father died about 18 years ago, and it was not possible to learn of what he died or anything of his personal history. All the nails of the left hand are affected, and the thumb and little finger-nail of the right hand. The other three nails of this hand, now fairly normal in appearance, had previously been involved in the same process. The nails are all discolored and very uneven, some being thin, split, and spoon-shaped, others thickened, distorted, and rigid. In places the process is advancing toward the matrix, with a yellowish outline to the diseased portion, accompanied by a crumbling and disintegration of the substance of the nail.

Dr. JACKSON would not diagnose the case as one of syphilis. There were no other evidences of hereditary syphilis, neither keratitis, flattened nose, bosses on the forehead, or defective teeth. It seemed to him an atrophic condition that would do well under continuous treatment with arsenic internally, and local protection.

Dr. DADE said he recognized the man as one who had attended for some time the Vanderbilt Clinic. He states now that the three middle fingers of his right hand, which are free of any lesion at present, were cured by the salicylic acid and tincture of green soap treatment which he received at the clinic. It was then thought to be a trophic disturbance of the nails.

#### **Tubercular Syphiloderm of the Nose, Extending Downward on the Right Cheek. Presented by Dr. SCHWARTZ.**

Dr. SCHWARTZ said that he had presented this patient at the last meeting of the Society, and brought him again to show the improvement in his condition. He has had 16 injections, beginning with  $\frac{1}{2}$  grain of bi-chloride of mercury hypodermically, working up to  $\frac{1}{2}$  grain; and potassium iodide from 20 grains t.i.d. to 55 grains. There was not so much improvement as might be expected from a specific condition, and he would like suggestions from the members as to whether it would be better to continue this treatment or to try something else.

Dr. KLOTZ said that the case was very much improved.

Dr. FORDYCE said when the case was shown at the last meeting he was inclined to think it lupus, though stating that it might be a tubercular syphilide. Since that time the treatment by injections of mercury and the internal administration of iodide had produced very little improvement. Some of the fungating lesions had disappeared from the surface, but the essential disease was still present.

Dr. WINFIELD thought it was lupus. With a month's treatment the case should have shown more improvement had it been syphilis.

Dr. DADE thought it a case of lupus.

Dr. SHERWELL requested the attention of the Society for a few minutes, in order to make a demonstration of some photographs supporting the remarks of Dr. Morrow in regard to the efficiency of curet-tage in epithelioma.

Both cases were operated on over six months ago with curettage and acid nitrate.

No. 1. A lady over 60. Epithelioma of inner side of the orbits and nose, involving both tear ducts. The woman was operated upon seven months ago, and the picture was taken only a few days since. Operated on by the curette and the application of acid nitrate of mercury. In this case the dry scab remained two months; the paquelin cautery was needed at time of operation to check the hæmorrhage. The entrance of the tear ducts was scraped away on both sides, and then the acid nitrate was applied under ether anæsthesia. The scab was very deep and involved the bone of the orbital plate of the superior maxilla and the nasal bone, and was everywhere touched quite freely for about twenty minutes with the acid nitrate. The eye was protected by a pad moistened with solution of bicarbonate of soda.

In the other case, No. 2—a man about 60—the lid was everted, and the lesion was scraped as far as could be done; then treated for twelve minutes with acid nitrate before neutralizing with soda. Local cocaine anæsthesia.

Dr. Sherwell said he thought this was the better operation, and the thing was gotten rid of at once. The woman—Case 1—had a year's treatment by the X-rays, at least forty exposures, and other treatment beside. Had already at first been lightly curetted, and which simply took the top off, and then she had the X-ray treatment. Neither did good. One at a casual glance now would hardly notice scar or cosmetic deformity, yet the curettage and destruction of tissue had been great.

Dr. Sherwell said that he presented these pictures to show how this treatment could be successfully applied in these delicate and dangerous situations.

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## NEW YORK ACADEMY OF MEDICINE.

Section on Dermatology.

Stated Meeting, held April 7, 1908.

Dr. A. R. ROBINSON in the chair.

(Concluded from page 434.)

**Tuberculosis Verrucosa (?) of the Palm.** Presented by Dr. HOWARD FOX.

The patient is a negro, 42 years old, an elevator man. Since boyhood he has had a "seed wart" upon the left palm. This was treated three years ago by acids and a partial cure was effected. He did not continue treatment on account of the pain it occasioned. A few months later the lesion began to increase in size, and from a pea-sized area has enlarged till it now measures one and a half by three-quarters inches. He has



had no other treatment except occasional applications of corn cures. Three and a half years ago he suffered from cough and bloody expectoration and lost considerable weight. He was practically cured by a trip to the South. The lesion is a circumscribed mass of rough and horny elevations. It is dry and does not present any inflammatory symptoms.

Dr. GOTTHEIL said that the lesion was not characteristically tuberculous. The hand was irritated by work; and the general appearance of the lesion, especially its carinate character, was strongly suggestive of syphilis.

Dr. LAPOWSKI said that the lesion did not look like either tuberculosis or syphilis, but rather like a simple product of irritation. He suggested the use of a chrysarobin ointment which would remove the hypertrophied epidermis,—which probably was due to the manual work of the patient, he being an elevator man,—and have a smooth surface, thus excluding both syphilis and tuberculosis.

Dr. TRIMBLE said that he did not think this lesion due to local irritation. Should the therapeutic test be applied in this case he advised constitutional antisyphilitic treatment, and no local treatment at all.

Dr. POLLITZER said that this was not a case of tuberculosis verrucosa cutis because the cutis itself did not seem affected, there being simply a heaping up of horny cells. He would not make a diagnosis of syphilis from this lesion alone, and the test of treatment, to be valuable, should consist of four weeks of injections. Palmar lesions in which parakeratosis is the dominant clinical feature are so confusing that a diagnosis is often impossible from local lesions only.

#### **Sycosis treated by the X-ray.** Presented by Dr. HOWARD FOX.

The patient is 24 years old, an iron worker, born in Russia. Two and a half months ago he presented a chronic sycosis barbæ of two years' standing which had resisted treatment by various ointments. He was given thirteen exposures to the X-ray during a period of two months. The exposures to rather hard tubes have averaged five minutes each, the tube distance being eighteen centimeters. The treatment was not pushed to the point of producing dermatitis. Improvement began after the seventh exposure and complete epilation followed the eleventh exposure. The bearded portion of the face is now smooth, hairless, and entirely normal in appearance except for a slight remaining redness. He has been advised to keep the beard closely shaven for a year to aid in preventing a relapse.

Dr. GOTTHEIL said that by epilation, under anæsthesia if necessary, with dressings of bichloride or other antiseptic solutions, the same result could be obtained in two weeks, with less expense and without danger.

Dr. POLLITZER said that there are few diseases so rebellious and also so variable as sycosis. It recurs after all treatment. He had seen a case treated by the X-ray to the production of apparently permanent alopecia, and some atrophy of the skin, and which had had every kind of local treatment and a course of opsonins also: yet pustules recurred.

Dr. ROBINSON said that he believed the X-ray to be of very great help as an adjuvant, and especially for its stimulating action.

Dr. HOWARD FOX, closing the discussion, said that he had treated the case slowly in order to avoid ill effects such as telangiectases, atrophy or permanent loss of hair.



**Keloid treated with the X-ray.** Presented by Dr. CLARK.

The patient is a girl 20 years old, American by birth. She is said to have had some heart trouble since childhood and now has a systolic murmur at the apex, from which she suffers a little on any considerable exertion. There is no history of keloid in her family. One year ago the patient cut her elbow with glass. It was not stitched but was allowed to heal by granulation, with subsequent formation of a keloid which was tender on pressure and painful when the arm was flexed. The keloid was excised and the wound sutured. It healed by primary union, but directly a larger keloid formed along the line of union and at the points of entrance and exit of the sutures. This was again excised five months ago because of pain and tenderness, but a third and larger keloid rapidly formed, which soon became tender on pressure and caused radiating pains up the arm, which often prevented sleeping and greatly incapacitated the patient for work.

When I saw the patient three months ago she had a tender keloid mass the size of a split walnut which had been causing her considerable suffering for the past month. She was given three X-ray exposures at intervals of five days with some relief of pain and tenderness, but not until after six exposures, with some slight dermatitis resulting, did the growth began to diminish in size. The patient has had in all eight exposures to the X-ray with a complete disappearance of pain and a flattening of the growth to the skin level, except at the suture points, and these are rapidly diminishing.

**Epithelioma of the face.** Healed with one long X-ray exposure. Presented by Dr. CLARK.

The patient is a female, 29 years old, American. The family history is negative. Ten years ago she received an injury to the area that two years ago became the seat of disease. The skin and complexion are normal. Two years ago a small spot that the patient had noticed for some months, below the inner canthus of the eye, became itchy, and after scratching it, she noticed a small scab there. This scab would fall off and re-form, and latterly the ulcer after the scab had fallen off would bleed a little. This condition persisted until one year ago, then there was a scabbed ulcer the size of a twenty-five cent piece which appeared as a typical epitheliomatous ulcer when the scab was removed, with raised hard pearly edges and a slightly excavated base. This ulcer was moderately superficial, and that together with its location made it well suited for X-ray treatment. Accordingly one prolonged exposure was given with a moderately hard tube localized to the epitheliomatous area, with the idea of producing a decided inflammatory reaction but not a burn. The patient was instructed to use a cooling salve for the redness and to report in three months if all went well. At the end of that time the ulcer

was entirely healed with a level pigmented scar except at the very lower edge which had not been included in the exposure. As this had been slowly diminishing in size it was left for further observation. Now after one year there is a perfectly hard white scar with no telangiectasis, and there is only a pin head sized pearly nodule left at the lower edge. To this I will give one prolonged localized exposure, which will undoubtedly remove it within six weeks. I recommend the method in all superficial epithelioma and in lupus, because of the quicker result that follows, a greater certainty of destroying the cancer cells, and a consequent less liability to recurrence.

**Prurigo (Hebra).** Presented by Dr. TRIMBLE.

The patient is a girl, 13 years of age. The disease is located on both upper and lower extremities and on the forehead. It began ten years ago as urticarial lesions, and has gradually increased in severity. Papules, scarring, and pigmentation are now present.

**Prurigo (Hebra).** Presented by Dr. TRIMBLE.

The patient is a boy 16 years of age. The disease has existed since infancy, and is located chiefly on the upper and lower extremities. There are a few lesions on the trunk, but practically none on the forehead. At the present time a number of pus infections are mingled with the lesions of prurigo. The lesions are very similar to those of the previous case—papules, scars, and pigmentation.

Dr. LAPOWSKI said that these were not cases of prurigo, as that disease was first described by Hebra, in which disease pustules never develop on the lesions. On the other hand, they correspond very well with Prurigo Hebra as described by the French school.

Dr. CLARK said that a lack of development in the child and a thick, pasty skin were almost universal in prurigo of Hebra, and that neither of these cases corresponded to that type.

Dr. POLLITZER thought that one of them was an average mild case of true prurigo, but that the other was not a case of prurigo at all, on account of the absence of lesions from the forehead and the presence of suppurative lesions.

Dr. TRIMBLE, closing the discussion, said that a case lasting so many years with such characteristic shotty papules, punctate scarring, pigmented spots, secondary infections and intense persistent itching, could hardly be called mild; and that it was not necessary that the lesions should always occur on the forehead, although they frequently did occur in that locality, as was evidenced in one of the cases presented.

**Naevus Pigmentosus (?).** Presented by Dr. ROBINSON.

The patient is a male, aged 28 years; occupation, clerk. His general condition is fair, he is of a rather nervous disposition. He never suffered from any special illness. The present disease commenced four years ago, on the left, upper scapular region, and gradually extended downward until at present it reaches nearly to the lower part of the scapula. It

occupies an area about ten inches long, and triangular in shape, the broader part upwards and about six inches wide. The upper half is diffuse in distribution, the remainder is made up of isolated lesions varying from a pea to a thumb nail in size. The appearance of the eruption is like an ordinary light colored chloasma, or tinea versicolor, and close examination of the skin shows no sign of atrophy, no elevations above the normal skin, no scaling, itching or other subjective symptoms. He had been lectured upon by some teachers and exhibited as a case of tinea versicolor, but microscopical examination excludes that disease. It is true that the isolated lesions resemble this disease most closely, and I regarded it as probably such until I made a microscopical examination. The disease has ceased to spread since about one and a half years ago. Histologically, the only change to be observed was increased pigmentation, limited to the basal layer as in chloasma or Addison's disease. There were no "nævus cells" to be observed. The case is shown for diagnosis as the course of the disease and the location is unusual for a chloasma.

Dr. POLLITZER, after hearing the pathological report, disagreed with the diagnosis of nævus. He considered it a mere pigmentation, probably secondary, and perhaps a result of irritation, as from applications made for sunburn. The absence of nævus cells in the cutis certainly excludes the diagnosis of nævus.

Dr. ROBINSON, closing the discussion, said that several writers, especially the French school, agreed that it is not necessary to find nævus cells in every case of nævus. Dr. White of Boston, who had seen this case, was sure that clinically it was nævus. The case is not one of simple pigmentation as in chloasma as shown by the increased growth of hair in some parts of the affected area, neither does he regard it as a case of nævus, unless the term includes different pathological conditions. For those who regard the presence of "nævus cells" as essential factors in the growth, this case is not one of nævus.

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## NEW YORK ACADEMY OF MEDICINE.

### SECTION ON DERMATOLOGY.

Stated Meeting, held May 5, 1908.

Dr. A. R. ROBINSON in the Chair.

#### Extensive Lupus Vulgaris. Presented by Dr. HOWARD FOX.

The patient is a woman, 44 years old, married, born in Ireland. When 15 years of age she first noticed a swelling on the left side of the neck which later broke down, continued to discharge for six years, and then healed. At the same age the eruption first appeared on the shoulder, knee and hand. Sixteen years ago she first noticed lesions on the neck in the neighborhood of the glands and later about the face. The lesions have slowly increased to the present time. She has increased in weight during the past sixteen years from 100 to 180 pounds. The lesions ulcerate at times and she then seeks hospital treatment. She has never at any time consented to any form of radical treatment. On examination the

nose, upper lip, and a considerable area of cheeks present dull red, dry, scaly lesions with raised and serpigenous borders. Patches have spread over both sides of the neck, leaving in places areas of remarkably smooth scar tissue. There are large serpigenous areas over the right shoulder, the left knee and the ulnar border of the left hand. The shape of the nose is fairly well preserved. The mucous membrane of the nose is also invaded.

Dr. GOTTHEIL said that he had seen this patient many years before; and then, as now, she would not permit vigorous treatment. She then had, in addition to her lupus, a very abundant general pustular syphiloderm; he had photographs of the patient taken at the time.

**Naevus Unius Lateris.** Presented by Dr. ORLEMAN ROBINSON.

The patient is a male, 17 years of age, born in Italy; his hair and complexion are dark. He is one of six children, and none except the patient has a similar cutaneous condition. The naevus dates from the time of birth. It is of a decidedly verrucous character in its entire extent and is markedly pigmented. It is limited to the right side of the body extending from above the ear to the lower third of the sternum. There is a break in the line on the side of the neck. The upper segment extends from above the ear to the middle of the neck. Its upper portion covers an area three inches in length and one and one-half inches in width. From this expanded area the naevus passes along the upper one-third of the posterior auricular surface curving downwards on the cheek two and one-half inches, where it abruptly ceases. The width of this portion is one-half inch. Another portion of the upper segment covers the middle one-half of the posterior surface of the ear and also the anterior portion, and extends over the lobule downwards and backwards on the lateral surface of the neck in a curved manner, when it suddenly passes downwards and forwards two and one-half inches, forming almost a right angle, to terminate about the middle of the lateral surface of the neck on a level with the cricoid cartilage. The lower segment commences over the thyroid cartilage and extends downwards slightly to the right of the median line almost to the end of the sternum.

Dr. POLLITZER said that he had a photograph of a case showing a very similar distribution, especially the curved line running down the neck from the ear, which is rather a common feature. He recommended excision of the linear lesions, leaving the ear alone.

**Neglected Syphilis.** Presented by Dr. WALLHAUSER.

The patient, a male, aged 16 years, was found occupying the cabin of a canal boat, where he had been confined for about two years without medical care. The only remedies he received consisted of various applications given him by acquaintances.

*Family history.* Father died of phthisis, the mother of typhoid fever. Two brothers and a sister are living, and in good health. The patient



was the youngest child. His father died one year after his birth. His mother was said to have had syphilis, but no definite history can be obtained as to whether it was contracted before or after the birth of the patient. About three years ago, the patient noticed an ulceration on the septum of the nose at its junction with the lip. Gradually it extended to the alæ, cheeks, forehead, etc. He is quite positive that he did not have a sore of any kind on any part of the body previously. The only abnormal condition he remembers was a swelling of the glands at the angle of the jaw, which was diagnosed as the mumps. Ulceration began about a week or so later. On admission to Newark City Hospital, March 14, 1908, almost the entire face was involved in a spreading tubercular eruption. The central portion had healed, while the borders were active and covered by thick black crusts. The lesion extended from the middle of the forehead across the lids, down the cheeks, to below the angle of the mouth, where the border turned upward involving the upper lip, following a similar course on the opposite cheek, back to the forehead, the two halves spreading out over the cheeks like the wings of a butterfly, as described in lupus erythematosus. The lower lip and chin were not involved. On account of sloughing of the tissues, the following conditions were present: There was an ectropion of the right eye. The left eye was entirely closed, due to pulling down of the upper lid by scar tissue. The nasal bones and cartilages had disappeared. The upper lip to the margin of gum had sloughed off, exposing the upper incisors, one of which, the right, was loosened and crowded over the left. There was an opening through the roof of the mouth through which the patient breathed, air gaining ingress through the mouth, as the nares have been entirely walled off by scar tissue. Since coming under observation, he has received intramuscular injections of mercury salicylate, and increasing doses of potassium iodide.

At the present time, May 5th, all active sloughing has ceased, and the patient is apparently well with the exception of the terrible deformity.

Dr. GORTHEIL said that he thought that in this case the history was a source of confusion rather than of help. The ectropion, the closure of the nares, the whole appearance of the face, was that of lupus vulgaris rather than of syphilis. The hard, red, dense, tumefied tissue of the face was not a scar left by syphilis: indeed, he believed the tuberculous process was still active.

Dr. POLLITZER said that at first glance the case was undoubtedly very suggestive of lupus vulgaris, but the course of the disease, its total duration of only three years, its healing in seven weeks under injections of salicylate of mercury, prove that it is syphilis. Contraction of the orifice may result from any destructive process. The photograph taken seven weeks ago shows active lesions: at the present time there is no single point on the face, no lesion, no nodule, no tubercle, nothing to show evidence of lupus.

Dr. WALLHAUSER, closing the discussion, said that the diagnosis in this case was based largely on the amount of destruction of the bony parts. Tuberculosis is a slower process, and even in extensive cases seems to avoid the bones: furthermore, the rapid recovery (seven weeks) should remove all doubt as to the diagnosis of syphilis.

**Peripheral Syphilitic Arteritis with Clinical Symptoms of Raynaud's Disease.** Presented by Dr. HOWARD FOX.

The patient is 33 years of age, single, Russian, a waiter. The family and previous history are practically negative. He suffered from gonorrhœa a year ago, but positively denies any other venereal disease. For the past nine months the toes and heel of the left foot have been constantly more or less cold and numb. From exercise or even standing, especially during the cold weather, the toes and heel would also suddenly become white, cold and stiff. They would remain in this condition for a varying time and would then become purplish and warmer. Eight months ago he had a severe attack of pain in the ball of the fourth toe. Three weeks later the skin broke, evacuating a little fluid, and leaving a sore that soon healed. Six months ago a hard lump half the size of a cherry was noticed on the inner aspect of the left leg. This lump disappeared after the patient had taken potassium iodide for two months. Treatment by inunctions and injections of mercury at Mt. Sinai Hospital (Dr. Lustgarten's Clinic) have produced decided improvement. No pulsation is felt in the posterior tibial artery of the left foot, whereas the pulsation in the right foot is normal. The urine shows one per cent. of albumin.

**Pityriasis Rubra Pilaris.** Presented by Dr. COCKS.

The patient, a negress 15 years of age, came to my clinic at the Harlem Hospital April 23d. The early part of March of this year a neoplasm was removed from the axilla, and one week later the present eruption appeared. There has been no increase of temperature. The whole body is involved. On the face and trunk the eruption is disseminated. The lesions on the arms, more especially the legs, are closely aggregated and consist of dry, hard papules, situated around the hair follicles. They are slightly brownish in color and if examined with a lens the broken hairs may be seen. Around the hair follicles a horny deposit has taken place and on the legs this deposit projects one-twelfth inch above the skin. The papules are not all of the same size, those on the face are smaller, not as hard and seem to be more inflammatory than those on the legs. The patient first noticed that the legs were rough and felt like a nutmeg grater, the eruption gradually spreading upwards. The face soon became involved. There have been no manifestations on the palms or soles. The younger lesions are capped with branny scales. The nails are not affected. In other respects the patient seems to be in a normal condition. There has been no pruritus.

Dr. POLLITZER said that the short duration of the disease was strongly against pityriasis rubra pilaris, which usually begins in infancy and spreads very slowly. Most of the lesions are absolutely typical of the lichen planus of Wilson. Mixed in with these lesions on the legs, which are œdematous, are those of purpura, and some of ordinary lichen pilaris also.

Dr. CLARK said that some of the lesions on the legs showed the typical bluish color of lichen planus.

Dr. ROBINSON said he had not seen many cases of lichen planus in negroes, but he has a colored photograph of a case of general acute lichen planus, and he was quite satisfied that this case was not one of pityriasis rubra pilaris, but of lichen planus, as the lesions were not acuminate nor were they follicular lesions, but were the usual ones seen in cases of acute general lichen planus.

Dr. COCKS, closing the discussion, said that he was still unconvinced. He could not account for the conical lesions on the arms, the backs of the hands, and the face, on the theory of lichen planus. On the legs there were true horny plugs, not masses of scales, which could be scraped out with the curette. The center of many of the lesions showed an atrophied hair and piled up mass of débris.

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## BOSTON DERMATOLOGICAL SOCIETY.

February Meeting.

Dr. J. C. WHITE in the Chair.

**Dermatitis Exfoliativa.** Presented by Dr. H. P. TOWLE.

Male, forty-eight, born in Italy. The patient came to the Massachusetts General Hospital, October 7, 1907. He stated that the eruption began two months before. The outbreak was attributed by him to bathing in salt water at the North End Park, because it appeared three days after the bath, and later was aggravated by a second bath. Beginning on the upper arms, the eruption involved in a few days the thighs, the back, the anterior surface of the body and, partially, the lower legs. The skin became intensely red and itching, and in a short time began to peel over the parts first involved, while the eruption continued to extend to other areas. The patient's general health has remained unaffected.

When first seen, except for small areas over the lumbar regions, the feet and face, the entire cutaneous surface was involved. The skin over the affected parts was of a bright, inflammatory red color, harsh and dry, swollen and covered with fine, thin, easily detached scales. The natural lines were much exaggerated; the skin felt much thickened and could be gathered up in great folds. The surface of the skin presented a papular appearance. At the borders of the affected regions were scalloped lines of thin scales, attached at their outer edges and larger than those over the inner portions. The skin just outside these scaling borders was bright red and somewhat infiltrated, but smooth and without scales. Scattered over the areas not yet uniformly involved were small superficially seated patches and lines interlacing to form a network of a paler red color and covered with small scales suggesting parapsoriasis.

In the further course of the disease the redness has gradually diminished and the swelling and scaling have disappeared, the oldest portions always involuting first. The process has ceased spreading, and, as will be seen, certain areas still remain free.



The scalp presents about the same appearances as when the patient was first seen, being covered with grayish, rather greasy scales, beneath which the skin is smooth and shining. The mouth and throat have never been involved. Itching has diminished with the disease in the intensity of the inflammation. The general health remains good. Nothing abnormal has been found in the internal organs.

Exfoliative dermatitis seemed a proper designation of the process on clinical grounds. As to the etiology of a majority of similar cases, we are as much at sea as we are with the pathology of gout and rheumatism. We assume the existence of faulty nutritional processes, decomposition of products the result of disturbed assimilation, etc., to be general causative factors, but it yet remains for biological chemistry to define these so-called diseases of metabolism of which the derinatosi in question is probably an example.

### **Syphilis? Post Scabetic Eruption.** Presented by Dr. H. P. TOWLE.

In November, 1907, the patient presented himself with what was believed at that time to be scabies of a month's duration. He had numerous typical, small, scratched papules over the sites of election. Under the usual scabetic treatment the itching disappeared promptly and the papules subsided. As the eruption subsided, however, it was noticed that a different type of eruption was making its appearance. Over the upper extremities, especially upon their inner surfaces, there developed scaling areas which were best seen in an oblique light. Close inspection showed that there were present pale red bands about one-fourth to one-half inch wide, which interlaced to form a wide-meshed network. These bands which were scarcely visible on direct inspection were very superficial and covered with very fine white scales which were more abundant at certain points than at others, forming at these points small pea-sized collections. Scattered over the surface of these bands, irregular and often angular papules with smooth, shining surfaces could be seen when looked at from an angle. Similar indefinite papules developed upon the body, chiefly upon the sides, often also on the arms. Interspersed between these lesions were small deep red macules, whose color did not disappear readily upon pressure, but which in appearance strongly suggested a syphilitic roseola. In December there also developed a lesion in the throat which suggested a mucous patch, but which quickly disappeared. For a time the appearance upon the arms and trunk continued to become more and more prominent but then became stationary and, despite subcutaneous injections of mercury, have shown little if any change during the past four weeks. There has been no history of syphilis, and other than those mentioned, no signs.

Despite the suggestive resemblance of many of the lesions, the appearances present were regarded as relics of the previous scabies, aggravated by an over vigorous treatment.



**A Case of Alopecia.** Presented by Dr. C. M. SMITH.

Man, *et.* twenty-eight, married. The first area of baldness appeared two months ago and has slowly enlarged to its present size (about that of a dollar); it is situated on the lower part of the occiput, on the left side. Three weeks ago other areas of alopecia began to appear over the vertex and temporal regions. All the affected spots were smooth, free from scales, and covered only by a little lanugo hair. As a result of microscopic examination, the exhibitor was inclined to the opinion that the case was one of small spore ringworm. The patient otherwise was healthy. There was no suggestion of syphilis either in his history or in his physical examination.

Consensus of opinion favored the diagnosis of alopecia areata in this case. The patient seemed too old to be infected with the microsporon Andouini, and furthermore, the absence of scales and broken off hairs was at variance with that affection.

**Pityriasis Rubra Pilaris. Myxoedema.** Presented by Dr. C. M. SMITH.

Mrs. W., widow, fifty-four years of age. For the past six to seven years the patient has not been in good health. She first noticed that portions of her skin were getting dry and thickened. Then it was remarked that her speech was somewhat slow and labored, and that her gait was unsteady. At about this time also her hair began to fall, finally causing so much alopecia that she was obliged to wear a wig. In the spring of 1903 she was told that she had myxoedema and was prescribed thyroid extract with much benefit to both speech and gait. As near as she can remember the present condition of the skin began four years ago. It appeared first on the face and scalp, and soon extended down over the body. Early in 1904 she went to the Boston City Hospital, but she does not remember what her affection was then called. Although she has improved at times, the regions involved have never been right since the onset of the disease. At present the process seems to be constantly spreading, but is in general not so severe.

The skin was universally affected except for small areas on the arms and legs. The palms and soles became thickened early in the course of the disease, accompanied by dystrophic changes in the nails.

The entire affected surface of the skin was diffusely reddened, infiltrated, and closely studded with firm small papules, pin's head to small pea-sized. On the backs of the hands and extensor surfaces of the forearms, some of the papules were thought to possess small horny projections in relation with the hair follicles.

The patient stated that she had never perspired much and scarcely any for fifteen years. She complained of considerable pruritus and chilliness on the slightest exposure to cold or draughts. Heat also induced itching. Here and there, where the skin had been scratched, the

papules were abraded and sometimes crusting; in other regions the older papules were somewhat lustrous.

Under continued treatment with thyroid extract the general condition of the patient, including the dermatosis, gait, and speech, have much improved.

The diagnosis of myxoedema was accepted. No one, however, on the appearances presented by the patient and by the somewhat unsatisfactory examination by artificial light, felt willing to concede the proposed diagnosis of pityriasis rubra pilaris. Besides the latter affection, chronic eczema and lichenification of the skin were considered. No positive opinion was expressed as to the nature of the malady.

**Dermatitis Herpetiformis.** Presented by Drs. C. J. WHITE and BURNS.

This man (a negro) is thirty-six years of age. He was born in the island of St. Domingo, and until within the last year has always lived in the Tropics. Since boyhood he has followed the sea on various vessels plying among the West Indian Islands. Previous to the onset of the present affection he had never had any skin disease and his general health had been excellent. Little knowledge of the patient's antecedents can be obtained.

He states that about six months ago he had an eruption on the skin like the present one, but milder and less extensive, which lasted two months, finally healing completely. There was then an interval of over three months during which his skin was clear. About two weeks ago, however, there reappeared on various parts of his skin an outbreak which he considers identical in appearance to the first attack.

When first seen, the man's appearance was puzzling. He is of the black type of negro, which further obscured the analysis of his symptoms. There were generally distributed over his trunk and limbs aggregations of lesions which at that time could only be identified as crusts covering superficially denuded areas, varying in size from one-eighth to one inch in diameter, with here and there confluence of the smaller lesions to form irregular and larger areas. Some of the older lesions, which were in process of healing, appeared as moderately infiltrated papules with rather lustrous tops. Between the affected portions, the skin, to all appearances, was normal. The patient said that the eruption burned rather than itched, and that he had little inclination to scratch. Many of the crusting lesions were abraded, probably from friction by the clothing, but there were no excoriations. Many of the elements looked as though they might have been primarily vesicular, but on closest inspection there was not an intact vesicle to be seen. The crusts seemed to be formed purely from inspissated serum, for there was nowhere any pus beneath or about them. The sites of predilection seemed to be the flexor surfaces of the arms and thighs, the abdominal and scapular regions.

The man's appearance was thought so interesting that he was admitted to the ward for skin diseases of the Massachusetts General Hospital. On the second day after his admission to the hospital a fresh outbreak of the disease occurred, which dispelled the uncertainty as to the nature of the disease, suggested by its obscure appearance when first seen. This relapse was purely vesicular and bullous in type, the lesions varying in size from pea-sized vesicles up to bullæ an inch in diameter. When fresh they were all well formed and tense with clear serous contents. As in the previous attack, there was a noticeable tendency to grouping, for on all the affected regions, there were more or less well defined irregular collections of lesions. The regions chiefly affected were the flexor surfaces of the limbs, the abdominal and scapular regions, and also several vesicles were clearly seen on the buccal and pharyngeal mucous membranes.

The interest in this case lay in the occurrence of dermatitis herpetiformis in the black race in which it had not previously been observed by this society. The symptoms of the disease seemed so well defined and characteristic that no doubt was expressed as to diagnosis.

#### **Tuberculide. Presented by Dr. J. S. Howe.**

This girl is sixteen years of age. For the past four years there have developed on her legs in winter, pustular and crusting lesions which in almost every case have run an indolent course of several months, finally healing and leaving depressed scars. The patient is quite positive in her statement that the outbreak has always developed in the winter and subsided in the summer. Where the crusts have accidentally been removed from the lesions, well defined, rounded ulcers, of some depth, have been exposed, which are noticeably pallid. It will be seen that the affection is confined to the legs and feet; very little occurring on the thighs. Distributed over the dorsa of both feet and legs are numerous small ulcers (crusting and open) and cicatrices varying in size from one-eighth to one-third inch in diameter. The ulcers are almost uniformly of the peculiarities above described. The cicatrices are thin, white, and depressed. None of the lesions have ever been very sensitive. So far as can be determined from her history and physical examination, she bears no stigmata of syphilis; neither is there history of tuberculosis in herself or family. Her general health has always been good except for sluggish circulation in the extremities, of which she has complained, in cold weather, since early childhood. It will be seen that the hands and feet are noticeably cold and passively congested.

Dr. Howe's diagnosis was thought most in agreement with the symptoms shown by the patient. It was suggested that this case would be an appropriate one for tuberculin treatment which had benefited several similar cases under observation during the past year.

**Alopecia Areata and Ring-worm in the same Subject.** Presented by Dr. C. M. SMITH.

A girl, thirteen years of age, had been under occasional observation for four months on account of a typical alopecia areata of the scalp. The lesions of this affection were several in number, including one over the left temporal region 2 x 3 inches in diameter, which was particularly characteristic, possessing a bald, smooth surface over which exclamation-point hairs were detected. About a month after the patient's last visit she again presented herself, showing a new lesion on the vertex which differed from the previous ones in that it was covered by fine, dull scales. On examination of the scales and hairs from this area, numerous small, densely-packed spores were revealed, taken to be those of the *microsporon Audouini*. This lesion now differs but little in appearance from those of alopecia areata, except for some redness of the scalp.

**Papular Syphilide.** Presented by Dr. ABNER POST.

This case was shown particularly on account of peculiar scaling papules on the back and abdomen, pin's-point to pea-sized, and covered by furfuraceous scales resembling in color and appearance lesions of *tinea versicolor*. Accompanying these lesions was a macular roseola, generalized over the trunk and limbs. Unusually large epitrochlear glands were both palpable and visible at each elbow. Dr. Post remarked that had he seen the patient for the first time by artificial light, he would have felt puzzled to distinguish the scaling lesions from those of *pityriasis versicolor*.

F. S. BURNS,  
Secretary.

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THE PHILADELPHIA DERMATOLOGICAL SOCIETY.

The regular monthly meeting of the Philadelphia Dermatological Society was held at the Jefferson Hospital, on Tuesday evening, May 19, 1908, at 8:30 o'clock, Dr. M. B. HARTZELL presiding.

**Lupus Erythematosus Limited to the Lip.** Presented by Dr. STELWAGON.

The patient was a male, 30 years of age. The lesion had first appeared three years ago, after the return from a trip to Iceland. The first thing noticed was a small slightly scaly spot, which felt somewhat rough to the patient, upon touching with the tongue. This small area had progressively, although slowly, increased in size. The lesion has, however, remained of practically the same dimensions for the last few months. It is situated upon the left side of the lower lip, extending from the median line to the angle of the lips, the vermilion border of the lip



and the inner surface of the mucous membrane of the same being, exclusively, involved. The lesion is dime-sized, almost annular, pinkish in color, with a slight shiny-white scale on the surface, somewhat infiltrated, sharply marginate, and of a "stippled" appearance. The area has been most resistant to treatment, but has improved somewhat under mild Roentgen treatment.

**Acnitis, A Probable Case of.** Exhibited by Dr. STELWAGON.

The patient presented was a male, 28 years of age. Until six months ago the man's face, according to his history, was without a blemish. The eruption appeared suddenly, most of the lesions came out in the one crop, although a few have appeared since then. In about one week after the eruption first appeared the disease was fully developed. The face was almost entirely involved, and excepting two lesions of the same character on the penis, the disease was limited to the same. The points of predilection seemed to be the eyelids and inner canthi, the cheeks at their junction with the alæ nasi, and the chin. The lesions consisted of bright-red and dull-red papules, and papulo-pustules, from small to large pin-head in size, mostly acuminate, but some flat, somewhat shiny in appearance, and some with a slight scale on the surface. The lesions tended to group, although there was but slight coalescence; linear formations were especially noted. Upon the disappearance of the lesions, deep irregularly shaped scars remained. Subjective symptoms were not prominent. The resemblance to syphilis and also to lichen planus was remarked. Dr. Schamberg at the April meeting showed a case of this unusual disease.

**Epithelioma Developing in Lupus Vulgaris, A Case of.** Presented by Dr. HARTZELL.

The disease had originally started fifteen years ago, at the age of 49. The patient, a male, is well-preserved and apparently in perfect health. The first lesion noticed was a small reddish-yellow nodule, which appeared on the upper part of the left forearm. Other nodules developed until the present, double palm-sized patch was formed. One year ago a small ulcer appeared on the center of this patch, which rapidly increased in size. The patient at various times had these nodules cauterized, destroying some, but not preventing the spread of the disease. At the present time the patch extends from the elbow, flexure surface, one-half way down the forearm. Most of the patch consists of scar tissue, from the frequent cauterization. There is, however, around the margin of the lesion, reddish-yellow, deep-seated nodules. In the center of the lesion there is a fungating, papillomatous, one-half-dollar-sized tumor, from which oozes a somewhat purulent discharge. The interesting fact was also discovered that the epithelioma developed at the site of a mole. A biopsy made of the tumor showed an epithelioma with an alveolar arrange-

ment, as found in the structure of a mole. One of the nodules was also excised, but has not as yet been examined. The resemblance of the tumor to blastomycosis was remarked, because of the miliary abscess-like openings in the growth. The shape of the large lesion and the character of the scarring resembled markedly a tertiary syphilid.

**Chancere of the Anus, A Case of.** Exhibited by Dr. SCHAMBERG.

The patient was a negro boy, 11 years of age. Two months ago the initial lesion appeared on the left side of the anal opening. The small original papule developed into a dime-sized, sharply marginated, raised, densely indurated lesion, with a moist, rough surface. The new-growth surrounded about one-half of the anal opening. Six weeks after the appearance of this lesion, or two weeks ago, the present eruption appeared. At the present time there is a somewhat general glandular eruption, the anterior and the posterior cervical being the most marked. There is a pharyngitis, and there has been "misery" in the muscles and the joints. A generalized flat, papulo-squamous eruption is also present. The palms of the hands and the feet are free. The eruption is most abundant on the trunk; most of the lesions being split-pea, and slightly larger, in size. The remains of the initial lesion can still be seen on the left side of the anal opening. The interesting history was discovered, that the probable origin of the initial lesion was from pederasty. A negro boy of 16 years had been in the habit of having anal intercourse with the present patient. Several other boys had supposedly been infected, in this same manner, by the boy of 16. The history was so clear that the source of the infection seemed to be proven, although the supposed infector has not been examined.

**Bullous Eruption Following Vaccination, A Case of.** Presented by Dr. SCHAMBERG.

The present patient, a male of 6 years, had been presented to the Society at the meeting held February 19, 1907. At that time the eruption had lasted about five months, and first appeared two weeks after vaccination. At that time the eruption was noted to have a symmetrical distribution, the flexures, the neck, and the genitalia being chiefly involved. The lesions were practically all bullous. During the last year and one-half the outbreaks have been almost continuous. When arsenic, however, was given the eruption entirely disappeared, but just as soon as the drug was discontinued a fresh outbreak occurred. At present the child has a severe relapse, not having taken any arsenic for some weeks. The eruption consists of bullæ on inflammatory bases. The lesions are now practically limited to the flexure surfaces; the wrists, elbows, axillæ, neck, chin, inner surface of thighs, the ankles, and the buttocks being the areas involved. The lips show a few bullous lesions, and the

tongue has also been attacked. There are no constitutional symptoms; the child appearing to be in the best of health. Those present thought that this case should be classed with those described by Bowen.

**Bullous Erythema Multiforme, Unusually Localized, A Case of.** Exhibited by Dr. SCHAMBERG.

The patient, a male of 36 years, was born in Poland. The present eruption started some weeks ago, with the appearance of the warmer weather. This is the third outbreak of the disease, the first appearing in the spring of 1906. Each attack has appeared in the early part of April, immediately after a few warm days, and has lasted until the cooler weather of the early autumn. In each outbreak the lesions have been limited to the ankles and the dorsal surface of the feet. The disease consists of an almost continuous crop of bullous lesions. At present the only active lesions consist of two bullæ on the outer surface of the left ankle. One bulla is hazel-nut in size, filled with almost clear fluid, it is tense, and is not surrounded by an inflammatory areola; the other is pea-sized, tense, and with hæmorrhagic contents. Both the right and left foot present pigment marks where the former lesions had been. Those present decided that the case should be classified under the erythema multiforme group, although atypical.

**Hyperidrosis and Hyperaemia of the Face, A Case of.** Presented by Dr. SCHAMBERG.

The patient was a male, 23 years of age, and born in Austria. He had always been healthy, and was of a muscular physique. The present condition had been present all of his life. There was a continuous moisture of the face, large drops of sweat being present even in the coldest weather. The small arterioles of the face were also distinctly visible. Marked hypertrophy of the parotid glands was a noticeable feature. The man complained of an excessive flow of saliva. There was also a congestive conjunctivitis on both sides. The dorsal surface of the hands, wrists, and the fingers showed a local stasis, being of a bluish-red color. Apparently the hyperidrosis was limited to the face. Numerous remedies had been tried with no effect. It was suggested that possibly the Roentgen ray might prove a benefit. Dr. Schamberg related the case of a patient, who suffered with a marked hyperidrosis of the axillæ, and who was markedly improved by the use of the rays.

In an informal discussion on the treatment of verruca, Dr. Hartzell related a case which had been entirely cured of almost one hundred warts, by the internal administration of magnesium sulphate, ten grains three times daily, for two weeks. Dr. Stelwagon referred to a cure of a like character, exhibited to the society some months before.

**Dermatitis Papillaris Capillitii, A Case of.** Presented by Dr. STOUT.

The patient was a white male, 20 years of age. The condition orig-



inally started about two years ago. A few deep seated papules first developed upon the posterior surface of the neck, these increasing in size and number. At the present time, there are about fifty deep seated papules, interspersed with small keloids, covering a space the size of the palm of the hand. The papular element is unusually marked, while the reverse is true of the keloidal. The condition has improved decidedly under strong salicylic acid plaster.

**Epitheliomata Developing upon Keratosis Senilis, A Case of.** Presented by Dr. STOUT.

The patient was a male, 63 years of age. Ten years ago he first noticed the development of pigmented, slight scaly spots upon the face and hands. These areas increased in size, and became slowly more numerous. The patient has now fully one hundred pin-head to almost dime-sized yellowish-brown patches on the cheeks, dorsal surface of the hands, but chiefly the forehead. These lesions vary from almost smooth, non-scaly, to those which are rough, very scaly, and papillomatous. Two of these patches, the one on the right and the other on the left side of the forehead, have broken down, forming lesions with ulcerated centers and papillomatous circumferences. One of these lesions is one-half-dollar and the other one-quarter-dollar in size, and both are cauliflower-like in appearance. A strong pyrogallic acid plaster has proved of benefit. Those present agreed that the general practitioner does not realize how dangerous "old-age-spots" really are; in so many cases being the precursor of epithelioma.

**Lupus Vulgaris, A Case of.** Exhibited by Dr. STOUT.

This disease first appeared in the patient seven years ago, at the age of thirteen. The growth, as in all of these cases, has been slow. The patient was born in Austria, exemplifying again that but few cases of lupus vulgaris occur in American-born children. The alæ and the tip of the nose, and the upper lip adjoining the same, were the areas attacked. The areas showed the typical reddish-yellow, "apple-butter" nodules, and an unusual amount of papillomatous growth, being fully one-sixteenth of an inch above the normal skin of the upper lip. Part of the left ala of the nose had been destroyed by the disease, and ulceration was still present. Fortunately for the girl, the disease is responding favorably to pyrogallic acid, thirty-three per cent. ointment.

**Lupus Erythematosus Limited to the Face, A Case of.** Presented by Dr. STOUT.

The patient, a woman of 50 years, had first noticed this condition six months ago. At that time small, red, scaly spots appeared on the cheeks. These have increased in size, until both cheeks are entirely



covered by the patches. The lesions are not as sharply marginate as usual, there is not the "bat's-wing" arrangement over the nose. The eruption is very superficial, almost eczematous in appearance, with a white scale on the surface, dipping into the patulous ducts. The scalp is uninvolved, the disease being localized to the face.

Dr. Schamberg exhibited again the case of acnitis that is to be reported in detail at a later date. Microscopical sections of the case were also presented.

FRANK CROZER KNOWLES, M. D.,  
Reporter.

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## REVIEW

of

## DERMATOLOGY AND SYPHILIS

Under the charge of A. D. MEWBORN, M. D.

### BACTERIOLOGY AND PARASITOLOGY.

By A. D. MEWBORN, M. D.

**Septicaemia due to the Bacillus Pyocyanus and true Chronic Bullous Pemphigus**, (Septicémie a bacille pyocyannique et pemphigus bulleux chronique vrai), G. PETGES and H. BICHELONNE. *Ann. Derm. et Syph.*, 1908, p. 417.

The authors resume the very carefully described case of true chronic bullous pemphigus as follows:

1. A patient suffering from chronic pemphigus had developed spontaneous multiple abscesses, which upon incision allowed a blue pus to escape.

2. Patient had at different times a discharge of blue urine in which the classic reactions revealed the presence of pyocyanin.

3. By aseptic puncture of the veins at different times before death and by aseptic puncture of the heart post mortem, blood was removed which when inoculated upon appropriate media gave constantly a pure culture of the bacillus pyocyaneus.

These results were controlled and confirmed by Dubreuilh and Auché.

Clinically the case was one commencing with bullæ, which by their character, continual reproduction without itching, or other pain except when the raw skin was exposed by ruptured bullæ, the general toxic symptoms and evolution towards pemphigus foliaceus with fatal termination stamps it as a true pemphigus intermediate in type between the acute infectious pemphigus (type Brocq, Pernet, Bulloch) and chronic pemphigus evolving during years.

The authors consider that the cases of pemphigus vegetans described by Pernet and by Winfield, in which the first found the bacillus pyocya-

neus in the bullæ and the second found the pyocyaneus in the blood help support their argument as to the causal rôle of the pyocyaneus.

To resume the conclusions of the paper the authors find that:

1. The bacillus pyocyaneus may become pathogenic for man; it may bring about general diseases with or without lesions of the skin and diseases of the skin of apparent exogenous cause. In both cases it may cause bullous cutaneous reactions.

2. Near the false pemphigus, is the class of diseases catalogued under the generic name of true pemphigus (acute infectious pemphigus, chronic bullous, and pemphigus vegetant appears to be caused by infectious processes.

3. The bacillus pyocyaneus may play a rôle in the production of chronic bullous pemphigus and of pemphigus vegetant.

4. The case of chronic bullous pemphigus here reported was uncontestedly caused by a septicæmia due to the pyocyaneus. This case seems to bear out the law of Roger that "The same microbe may produce absolutely dissimilar clinical manifestations: clinical manifestations in appearance identical may be produced by different microbes.

**Eczema Marginatum of Hebra** (Sur L'Eczema Marginatum de Hebra, "Trichophytie Inguinale" et son Parasite, Epidermophyton inguinale Sabouraud). R. SABOURAUD *Arch. d. Med. Exp. et D'Anat. Path.*, 1907, pp. 565, 737.

The author presents a very exhaustive study of the so-called Eczema Marginatum of Hebra and shows by incontrovertible evidence that before Hebra (1860) described the clinical picture in so masterful a manner, and before Köbner (1864) and Pick (1869) described the parasitic mycelium, that Devergie in *Maladies de la Peau* (1857), carefully differentiates the condition from intertrigo by the raised border (*bourrelet*) that he, known to be hostile to the idea of a mycotic origin of tinea capitis, nevertheless was inclined to regard the condition as due to a parasitic growth. The plate accompanying the text gives a drawing of the microscopic appearance of the scales from which Sabouraud says a diagnosis could be made to-day. The plate bears the title *Herpès inguinal microsporon*.

Sabouraud resumes his general conclusions as follows:

1. There exists a circinate and marginate dermatose, with large trichophytoid circles described by Hebra under the name of Eczema Marginatum, ordinarily localized in the fold of the groin and less often in other natural folds. A disease much more frequent in men, sometimes of acute evolution, but much more often of long duration with slight functional symptoms. A disease transmissible by sexual contact and which may in the absence of direct contact give rise to family and school epidemics.

2. We have found this disease invariably caused by the same mycelial

parasite having all the characters of a trichophyton except the negative character of not invading the hair. This parasite is distinct from all parasites which one may observe in the same regions and particularly from the *Microsporon minutissimum* of erythrasma. This parasite is cultivable upon appropriate media and furnishes a trichophytoid culture, botanically one of the principal characters of the family of trichophytons, its culture is characterized in addition by the rapidity of its senile degeneration and the rapid formation of the pleomorphic down. This culture as is true of many cultures of trichophytons, has not been successfully inoculated in man or in animals.

3. Sabouraud proposes to designate this disease under the name of Inguinal Epidermophytosis (*Epidermophytie inguinale*) and the parasite should be called the Epidermophyton Inguinale.

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#### BOOK REVIEW.

**A System of Syphilis**, in six volumes. Oxford Medical Publications. Edited by D'ARCY POWER, M.B. OXON, F.R.C.S., and J. KEOGH MURPHY, M.D., M. C. CANTAB, F.R.C.S., with an introduction by JONATHAN HUTCHINSON, F.R.S. Publishers, Henry Frowde, Oxford University Press, London, 1908.

The great progress made in the study of this protean disease by the discovery of the spirochæte pallida, the causal agent, as well as the light thrown upon many obscure points by recent animal experimentation, fully justify the editors in bringing out this system of Syphilis by various authors. The handsome illustrations, many by half-tone reproductions of direct color photographs, the superior quality of paper and typography, are all most creditable to authors and publishers.

The Nestor of Syphilographers has introduced in the form of paragraphs many interesting themes for study as well as observation that are truly Hutchinsonian. For instance, where he refers to the resemblance of the spirochæte pallida of Schaudinn to the spirochæte per-tenuis found by Castellani in *Parangi*, he says: "It is possible, however, that these apparent differences may prove to be more apparent than real. It may perhaps prove to be the fact that the spirochæte bred in different climates and in different races is capable of some modifications. These modifications may no more constitute specific characters than do the horns of a Scotch sheep or the hornless, dusky face of a well-bred Southdown. All our domestic sheep are unquestionably of one species, and in spite of their very conspicuous differences and the fact that they usually breed true, they may be crossed and are prone to revert."

Dr. Iwan Bloch, in the chapter on the history of syphilis, says: "All available statements and facts point to the last decade of the fifteenth century—particularly the years 1493-1500—as the time when

syphilis first appeared in the Old World. There is not a particle of evidence to show that the disease existed in Europe before that time." Hutchinson refers to this in the introduction as "a long and hotly debated question that may perhaps now be considered as finally decided."

Metchnikoff, in the chapter on the microbiology of syphilis, gives a very interesting account of the work that has been done (Hoffmann quotes 750 articles, Dec., 1906) in the study of the spirochæte pallida, and is really too modest in reference to the work done by himself in collaboration with Roux in the experimental inoculation of syphilis in monkeys. It is refreshing to find such genuine homage to the merit of Schaudinn, to quote, "We must consider it a particularly fortunate occurrence for science that the discovery of the ætiology of syphilis fell into the hands of a man like Schaudinn, a zoologist by profession, who before this work had proved his ability by his research on the spirilla of birds and that of relapsing fever in man."

The general pathology of syphilis is very clearly presented in the next chapter by F. W. Andrews, pathologist to St. Bartholomew's Hospital. The clinical description of the primary lesion and early secondary symptoms in the male are fully described by Colonel Lambkin, while the same subject as seen in the female is described by Shillitoe. Congenital syphilis is handled in the concluding chapter of the first volume by Dr. George F. Still.

The list of contributors to the remaining five volumes promises well for the high class of the entire system.

A. D. M.



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## MODERN DERMATOLOGICAL PATHOLOGY AS RELATED TO PRACTICAL THERAPEUTICS\*

BY M. B. HARTZELL, M. D., PHILADELPHIA

**A**T first glance it would seem extremely easy to define the relationship existing between the treatment of disease and pathology. It would appear that a fairly complete and accurate knowledge of the nature, causes and results of disease must of necessity precede its intelligent and successful treatment. But even a superficial acquaintance with the history of Medicine immediately reveals the erroneousness of such a view. It is possible to understand thoroughly the nature of any given malady, to know accurately the causes which produce it, to be familiar with its results, to even possess agents which destroy the cause, and yet be unable to materially influence its course. On the other hand, we may be in complete ignorance of or have entirely erroneous ideas about the pathology of a disease and yet be able to treat it with entire success. Cinchona was successfully employed for two hundred years or more before we really knew anything of the nature and causes of the malarial fevers, and the same may be said with equal truthfulness about the use of mercury in syphilis. If Medicine, and more especially Therapeutics, were an exact science based upon well-defined and fixed laws the relationship between pathology and therapeutics would probably be equally well defined and fixed. But I need not remind this audience that, almost without exception, our most valued and effective remedies, the few specifics which we possess, are almost entirely empirical, their use resting, at least for a long period after their discovery, upon no scientific basis and often employed in disease about whose pathology the most erroneous ideas prevailed. Of course, what is true of general medicine is equally true of the special branches of it. Many diseases of the skin were treated with more or less success long before their pathology was

\* Read before the 32d Annual Meeting of the American Dermatological Association, Annapolis, September 25, 1908.

even studied, and in many instances our pathological knowledge has brought no change in the methods of treatment employed.

It is an extremely suggestive fact that in dermatology as in general medicine, while theories as to the nature and etiology of many affections have undergone frequent change during a long period of years, in a not inconsiderable number the treatment has remained unaltered, showing that successful or at least satisfactory management of these diseases has been arrived at without the aid of pathology.

While there can be no doubt that our knowledge of the pathology of the skin has been increased enormously during the past quarter of a century, we are apt to lose sight of the fact that this increase has taken place in certain directions much more than in others. We have learned much about the histo-pathology of the skin, thanks to the great advances which have been made in microscopic technique. We know more of the intimate nature of the changes resulting from disease in the skin than ever before; indeed, our knowledge in some directions may be said to be fairly complete in this respect, but when we come to the etiology of cutaneous maladies the most important part of pathology, there is quite another and far less brilliant story to be told. Here the lacunæ in our knowledge are painfully frequent and great, although we are beginning to close some of these too.

I know of no better way to learn how much and in what way modern pathology has influenced the treatment of cutaneous diseases than to briefly review side by side the pathology and treatment of a few of the more important diseases of the skin as taught to-day in the most recent treatises upon dermatology. But here we at once meet with a serious difficulty in the existence of decided differences of opinion among authors as to many questions of pathology. But it is worthy of note that however great their differences about pathology they are practically of one mind as to treatment.

The three principal theories as to the nature of eczema are: 1st, the neuropathic theory which regards the nervous system as playing the chief rôle in the production of inflammation of the skin; 2nd, the theory that it is due to the invasion and growth of parasites, the toxic products of which acting as irritants cause an inflammatory reaction in the skin; 3rd, the theory that it is a dermatitis arising from the absorption of toxins of some sort, usually from the gastrointestinal canal, that is, that it is a toxæmia. The first of these theories seems to have exerted but little influence upon the treatment

of eczema either because its adherents did not have the courage of their convictions, or because remedies which act upon the skin through the intermediation of the nervous system satisfactorily are few. Whatever the real reason remedies directed towards the nervous system play a very insignificant rôle in the modern treatment of eczema. The second or parasitic theory, on the other hand, has exerted and still exerts a very great influence, more especially upon the local treatment of this affection. There is a very decided tendency to use such local remedies as are known to destroy or inhibit the growth of microörganisms, and the good effects of many of the older local remedies are at the present day attributed to their parasiticide powers. Whether this use of parasiticides has always been advantageous this is not the time nor the place to discuss. The toxæmic theory, which is in fact a very old one in a modern dress, has long influenced the constitutional treatment of certain forms of eczema, more particularly the chronic forms involving the greater portion of the cutaneous surface, characterized by many relapses, and it is likely to exert a still greater effect as our knowledge of toxins of one kind and another increases, since we are beginning to learn that these have a very important share in the production of many general as well as local affections.

Upon the whole, I think we may say that the treatment of eczema has been decidedly influenced by modern pathological conceptions, more particularly the local treatment, as shown in the greatly increased use of such agents as are known to be parasiticides.

Psoriasis and lichen planus are striking illustrations of the fact that disease may be successfully treated, though we may be without any definite knowledge of its real nature and causes. The treatment of these two maladies is entirely independent of any of the various theories held as to their pathology. We treat psoriasis to-day practically as it was treated one hundred years ago. We give arsenic internally because we have learned by experience that it will at least cause the temporary disappearance of the eruption, but how it does so, or why, we are in complete ignorance, and the same may be said with equal truth about lichen planus.

During the past quarter of a century our knowledge of the entire group of tuberculous affections of the skin has been enormously amplified in all directions, and our knowledge of many of the members of the group is singularly complete. The infectious character of the diseases comprising it is firmly established, their histopathology is well determined, the infecting agent is definitely known;

and yet this knowledge has thus far been almost completely barren of results in making treatment more successful. The treatment of lupus vulgaris, which may be taken as a type of the group, is essentially the same as it was a century ago. We do not cure the disease, we destroy the tissue affected by it, and this not because we do not have remedies which destroy the bacillus, the active cause of the malady, but because we have not yet learned how to use these without at the same time destroying the tissues in which the bacillus multiplies. In other words, its successful treatment depends not one whit upon our pathological knowledge.

The group of vegetable parasitic diseases presents a much more agreeable picture. Here pathology and therapeutics go hand in hand, but even in this group successful treatment did not wait upon pathology since these affections were cured long before there was any real knowledge of their nature.

These few examples will, I think, sufficiently illustrate how little modern pathology has actually influenced the treatment of diseases of the skin. We employ much the same remedies that our predecessors did, but we use them on somewhat different theoretical grounds, that is all. Much as we have learned about the nature of disease, we have yet much more to learn. We have been studying until a comparatively recent period the results of disease, pathological morphology, rather than seeking for causes and the explanation of the manner in which they produce their results.

Apart from the inadequacy of our knowledge of the nature and causes of many morbid processes, the utilization of much of the knowledge we do possess is made difficult and not infrequently impossible by the extraordinary lack of accurate information concerning the physiological effects of drugs upon the skin when taken internally, and more especially when used locally. Without such knowledge scientific therapeutics based upon pathology is an impossibility. In addition to knowing what is to be accomplished in the treatment of disease it is absolutely necessary to know the effect of the agents we are employing if these are to be used accurately and with certainty of result.

No knowledge remains forever barren, and even now we are beginning to reap the fruits of our better understanding of the pathogenesis of many cutaneous diseases. The use of bacterial vaccines and of various sera promises to put the treatment of many diseases of the skin upon a thoroughly scientific basis dependent upon our knowledge of pathology and what is still better, promises to make



it more successful than ever before. We must not forget, however, that increased knowledge will also certainly show us how entirely futile must be every attempt to restore diseased tissues to the normal in certain cases. But even if increased knowledge does not bring us new remedies it will certainly enable us to employ old ones with a definiteness of purpose which is now impossible.

## MODERN DERMATOLOGICAL PATHOLOGY AND ITS RELATION TO THERAPEUTICS \*

BY CHARLES J. WHITE, M. D.

**M**EMBERS of the American Dermatological Association: Before entering upon this year's chosen theme I wish to thank your Council for its kindness in selecting me as one of its annual reporters and I desire also forgiveness if I fail to reach the normal standard of my predecessors. To confess the truth I have found the present task a very difficult one and I have pondered many hours over the exact meaning of this year's topic of discussion. In fact, I was obliged finally to consult your secretary, as one of the committee who sanctioned this subject, and the following paper is based upon his interpretation of the Council's choice.

During the last twenty years our pathological knowledge of cutaneous diseases has increased greatly owing to our improved histological technique, our deeper understanding of bio-chemical reactions and the almost universal participation in pathological investigation of our modern dermatologists; and as a result we have very complete histological data concerning practically every recognized dermatosis. So intimate, indeed, is this knowledge that it does not seem an exaggeration to assert that we know all that can be known of this valuable and fascinating subject until some brilliant genius shall devise some new means or methods of study and research.

The gist of our present knowledge of the seat and the nature of the changes in cutaneous diseases may be recorded in the following table which Darier has devised: In the stratum corneum we find the results of superficial trauma and the invasions of the *acarus scabiei*, *microsporon furfur*, *microsporon minutissimum*, *tinea trichophytina* and *tinea favosa*. In the strata corneum, lucidum, granulosum and upper spinosum we place the lesions of the hyperkeratoses including callus, clavus, akrokeratoma, ichthyosis, pityriasis rubra pilaris, lichen pilaris; and of the parakeratoses, embracing psoriasis, eczema seborrhoicum, eczema squamosum, dermatitis exfoliativa,

\* Read before the 32d Annual Meeting of the American Dermatological Association, Annapolis, September 25, 1908.

pityriasis simplex; and finally the sequelæ of burns and vesicatories. In the strata lucidum, granulosum and upper spinosum we locate the dyskeratoses, comprising psorospermosis, molluscum contagiosum and Paget's disease. In the strata lucidum, granulosum and entire spinosum we note the acantholytic processes, i. e., eczema vesiculosum, herpes simplex, herpes zoster, prurigo, dermatitis herpetiformis, hydroa æstivale, impetigo, varicella and vaccina. In the lower rete we meet the hyperacanthotic changes—lichen planus, lichenification, verruca, vegetations, and acanthosis nigricans. In the stratum germinativum we encounter the dyschromias—albinism, melanoderma, chloasma, vitiligo and lentigines. And lastly in the epidermic diseases and affecting the layer as a whole we find the tumors—adenoma, epithelioma, keratoma, papilloma and the cysts.

Coming to the corium we know that the papillary layer is the principal seat of the congestions, erythemata and roseolæ; of the œdemata, especially urticaria; of the acute classes of dermatitis including erysipelas, ecthyma, ulcer durum, acne and folliculitis of the infectious type and the toxicodermata; and finally of the chronic group of dermatitis—tuberculosis, lupus erythematosus, syphilis, lepra, granuloma fungoides, elephantiasis and scleroderma. We know that throughout the corium proper we must look for the presence of cicatrices and the various degenerations to which the skin is heir—senile, colloid, myxœdematous and elastic. We know that the hypoderm is the seat of the deep hæmorrhages of purpura, of hydropy, of syphilitic, tuberculous and leprous gummata. And finally, we know that throughout the corium as a whole we may find the tumor formations of mollusciform nævi, sarcoma, fibroma, neuroma, myxoma, xanthoma and lipoma.

In addition to these comprehensive topographical data we have the time-honored, though somewhat modified, pathological classification of Hebra which separates our recognized diseases into hyperæmias, inflammations, hæmorrhages, hypertrophies, atrophies, new-growths, neuroses, diseases of the appendages and parasitic affections. It is not necessary for me to enumerate to this expert audience the approximately two hundred titles comprised in these seven classes, but let me state that with the complete understanding of these terms in one's mind plus the accurate information contained in the first table one should be able, on a moment's reflection, to comprehend exactly the entire pathological nature of any given disease.

Keen ability in diagnosis and profound knowledge of pathology

are, however, not sufficient accomplishments to enable the practitioner to cure disease. The physician must also be a master of therapeutics.

What has been our classical knowledge of healing agents and their physiological action? In the recent past the chief methods of administration of drugs has been by internal and by external means.

### *Internal Medication*

Long experience has taught us that certain drugs, especially arsenic, mercury and the salicylates, tend toward stimulation of cells, and dermatologists have employed these drugs with varying success in many chronic conditions such as eczema, psoriasis, granuloma fungoides, dermatitis herpetiformis, pityriasis rubra, dermatitis exfoliativa, lichen planus, acne, chronic urticaria and sarcoma.

The iodide group has proved its marked ability to stimulate tissue changes and accomplish the disappearance of certain specific productions in the skin, notably those of syphilis, blastomycosis and actinomycosis.

Many drugs, such as bismuth, salicylic and carbolic acids, B-naphthol, creosote, salol, ichthyol, phosphate and bicarbonate of soda have antiseptic and antifermentative qualities which render them useful in those affections of the skin which we think are due to auto-intoxication.

To combat dermatoses which we associate with nerve disturbance, among which we include lichen planus, pemphigus, dermatitis herpetiformis, chronic urticaria and pruritus, we administer quinine with some success.

Against the hyperæmia of acne vulgaris, acne rosacea, and lupus erythematosus we employ ichthyol, ergot, and the antiseptics, carbolic acid, etc.

To stimulate the secretion of sweat pilocarpin has proved useful, but whether this drug acts upon the nerve terminals or upon the glands themselves, pharmacologists are still in doubt.

To control excessive sweating, on the other hand, atropine has proved our most successful medicament.

Diuretics and cathartics are of unquestioned value in the treatment of such diseases as acute eczema, dermatitis venenata, urticaria and the acnes and potassic acetate and magnesic sulphate stand almost preëminent in their respective classes.

This astonishingly small list of useful drugs indicates our



therapeutic knowledge of a few years ago and of this mere handful of somewhat valuable remedies only one drug can be called a specific.

### *External Medication*

In this division of dermatological therapeutics the list of time-honored drugs is very large but once more it must be confessed that the number of really specific applications is distressingly small.

As detergents we have had soaps, oils, neutral fats and liquor carbonis detergens. To soothe and protect the skin we have relied on oxide of zinc and calamine, bicarbonate of soda, subnitrate of bismuth, subacetate of lead, talc and acetate of aluminum. As astringents tannic acid, alum, bismuth, boric acid, acetate and oleate of lead and zinc have been our stand-bys. To combat itching carbolic acid, chloral, camphor and menthol have proved their usefulness, some by actually depressing the nerve sensation and others by substituting a different stimulation. To produce anæsthesia carbolic acid has been our mainstay. For their stimulating effects we have employed tar, sulphur, mercury, green soap, nitrate of silver, carbolic acid, iodine, balsam of Peru, chrysarobin, cantharides, capsicum and croton oil. In the caustic class we have relied upon salicylic acid, bichloride of mercury, tincture of iodine, resorcin, mustard and nitrate of silver to produce a mild effect and upon carbolic, glacial acetic, trichloroacetic, chromic, nitric and sulphuric acids, arsenic, chloride of zinc and the hydrates of potash and of soda to produce a deeper action, while as an immediate destroyer of tissue we have used the actual cautery, either electric or Paquelin. As keratolytics salicylic and boric acids, alkaline soaps, resorcin, liquor carbonis detergens and the milder alkaline caustics have established their worth. As reducing agents tar, in the form of *pix liquida* or of *oleum picis*, oil of juniper (*cadini*), oil of birch (*rusci*), ichthyol, creosote, resorcin, sulphur, aristol, chrysarobin, pyrogallie acid, permanganate of potash and B-naphthol have all received well-merited recognition. Carbolic and boric acids, mercury, sulphur, copper, sulpho-naphthol, iodoform, B-naphthol, styrax, balsam of Peru and chrysarobin have all answered their purposes admirably as effective superficial antiseptics and parasiticides, but when called upon to destroy deeper-lying organisms they have failed us lamentably.

Such is the story of the past, and these many drugs plus electricity, massage and the knife have constituted our therapeutic ar-

mamentarium up to within a few years. For the last ten or fifteen years, however, the science of dermatology has not remained stationary but has advanced *pari passu* with all other human activities and during this prolific epoch many new forms of treatment have been discovered and have rendered invaluable service to our successful struggle with disease.

Let me enumerate these innovations and discoveries. 1. New drugs. 2. Radiotherapy. 3. Electrotherapy. 4. Actinotherapy. 5. Hydrotherapy. 6. Organotherapy. 7. Psychotherapy. 8. Congelation. 9. Hyperæmia; and lastly, 10, the wonderful and pregnant theories and applications of the various sera. Surely this list is an impressive witness to the mental activity and fertility of modern medical men.

And now let us examine these new methods a little more closely.

### *New Drugs (External)*

The compounding of this list is a difficult task, first, because the line dividing the old from the new must be a purely arbitrary one; secondly, because out of the hundreds of new synthetic compounds which have been manufactured but comparatively few have established their superiority over the older, well-tried drugs; and thirdly, because the personal equation proves an important factor, for with many medicines one therapist succeeds where another fails. I must, therefore, confine this chapter to the few, relatively modern drugs which have aided me in overcoming difficulties.

Among the aniline dyes a few, such as methylene and pyoktanin blue and scharlach R have proved of distinct assistance in cleansing foul or indolent ulcers and in stimulating granulation in the trying ulcerations of scleroderma, Raynaud's disease and other trophic disturbances, and in the arteritic sores consequent upon senility or over-exposure to X-rays. As a stimulant in lupus vulgaris and lupus erythematosus these brilliant dyes have been of benefit also.

From the long list of newly compounded dusting powders, aristol (dithymol di-iodide), nosophen (tetra-iodo-phenolphthalein) and tannoform (tannin-formaldehyde) seem to be the most satisfactory substitutes for the most valuable but irritating and evil-smelling iodoform and they surely aid one in drying up serous or purulent ulcers or the excessive secretions of hyperidrosis.

In seborrhœa euresol (resorcin mono-acetate) replaces resorcin to great advantage and is far less irritating and discolors grey hair

but little. Combined with corrosive sublimate, formic acid and alcohol, euresol constitutes the best hair wash that I have ever found for curing dandruff. Another useful adjuvant in our daily struggle against seborrhœa capitis is captol (an impure mixture of chloral hydrate and tannic acid) and when combined with chloral hydrate, tartaric acid and alcohol provides a good cleansing and stimulating hair wash.

Pilocarpin, by its exciting influence on the hair, has won a well-recognized place for itself in the treatment of alopecia. Trikresol (containing the ortho, meta and parakresols) from its very strength proves its usefulness as a substitute for croton oil in obstinate cases of alopecia areata.

When confronted with a distressingly painful ulcer one derives benefit from orthoform (the methyl ester of para-amido-meta-oxybenzoic acid). This powder, applied in ointment form to a broken surface does certainly alleviate suffering, but in susceptible individuals it not infrequently exerts a necrotic action on the tissues, so that one must be vigilant in its use.

This concludes the list of the newer external remedies which have shown marked superiority in my hands over time-hallowed drugs of previous generations but surely the advance recorded here is not remarkable.

### *New Drugs (Internal)*

In this category modern therapeutic progress is equally limited. Through the work of Wright, Paramore and others we have learned that the coagulability of the blood is diminished in œdema circumscriptum acutum, pernio, purpura and urticaria. We have learned also that the acid foods increase this fault and that milk decreases it. To combat this condition Wright and his followers have suggested the administration of calcium salts, especially the lactate in small continued doses or the chloride in one or two massive amounts, and this advice has been taken by many of us. Personally, I agree to the first two of these tenets, but as to the practical value of the third I have not become wholly convinced despite rather extensive trials.

To overcome the new disease, blastomycosis, we have a very valuable remedy in the old drug, iodide of potash, and this medication is equally beneficial in actinomycosis.

To vanquish the old disease, lichen planus, we have made use of the old drug mercury with great success and this happy result de-

pendes probably on the stimulating effect of this metal on the nutrition of cells. In my own practice it has entirely supplanted arsenic.

In leprosy many experienced therapeutists have employed chaulmoogra (*oleum gynocardiaë*) with some benefit. This drug is certainly not a specific, but many of these unfortunates have improved distinctly under its influence. Its great disadvantage is its irritative action on the stomach, and for this reason it should be given in milk, in capsules, or in the form of an emulsion. Dyer seems to have obtained even better results in the treatment of this baleful disease by the simple methods of modern hygiene.

After an exposure to syphilis the inunction of the penis with a 30% calomel ointment has been known to abort an infection of the disease in one human subject at least, and Metchnikoff, Hallopeau and others have found this simple procedure absolutely trustworthy in many animal experiments. Neisser states in addition that the same results may be obtained by the use of 0.3% bichloride of mercury solution, 10% quinine-glycerine-water solution, or 50% iodoform-glycerine.

#### *New Drugs (Subcutaneous.)*

In this division of therapeutics there has been distinct advance. In the treatment of syphilis the subcutaneous method of mercurial administration has almost superseded all others on the continent of Europe, and to a certain extent in America—certainly in rebellious and in emergency cases. New forms of mercury have sprung into use, such as the grey oil, the cyanide and the salicylate, which have their greatest vogue in France and Germany, while the safer soluble salts, especially the bichloride, are in favor here.

Since the discovery of the *treponema pallidum* an enormous amount of experimental work has been done everywhere, and we have been able to learn much about the biology and the treatment of syphilis. In Europe, particularly, investigators have found that combinations of salicylic acid and of arsenic with mercury seem to exert a more powerful action on the cause of the disease. This discovery has led to the use of *énésol*, the salicyl-arsenate of mercury, and in my own experience injections of this sterile liquid have aborted several fresh roseolæ within a few days. Besides its rapidity of action, *énésol* possesses still further and almost equally important advantages in its striking painlessness and in its freedom from resulting infiltration, so customary with the bichloride and practically all other



forms of injected mercury. Recently, we have been using this drug in lichen planus with striking success, the combination of mercury and arsenic being a happy one in this disease.

With the knowledge of the potent effects of arsenic on the protozoa some experimenters have endeavored to assert the superiority of this drug over mercury in the treatment of syphilis. Metchnikoff, Uhlenhuth and Weidenz claim that atoxyl (arsenic acid anilid) will prevent the appearance of syphilitic symptoms secondary to the artificial inoculation of apes and rabbits, while vigorous treatment with mercury proves less successful. Neisser makes the same claim, but uses acetyl atoxyl, which is far less toxic, and, being a stable product, is sterilizable. Metchnikoff, Neisser and Hallopeau believe they have injected numerous patients with atoxyl successfully, and Hallopeau has become a strong advocate of its use, but his confrères, Renault, Gaucher and Hoffmann, assert that this drug acts only by destroying the easily accessible spirochætes and leaves the deeper-lying organisms to flourish at will. Consequently, they condemn the use of this medicament in no unmeasured terms.

Hallopeau records the successful employment of atoxyl in leprosy, Neisser in frambœsia, and others in granuloma fungoides.

Arsenic in another compound form has been the subject of still further experimentation in other diseases. Numerous investigators have injected sodium cacodylate (sodium dimethyl arsenate) in leprosy, psoriasis and lichen planus, and are enthusiastic in their praise of the superior results obtained from its use; but many others feel that the dangers of toxic absorption, especially in regard to the optic nerve, associated with these injections, far outweigh any possible therapeutic advantages.

Thiosinamin (allyl-sulphocarbamide) has gained some strong partisans as a solvent of hypertrophic fibrous tissue, but the injections of this drug in my clinic have been attended with only partial success. Even stronger reliance is placed in fibrolysin—a combination of thiosinamin and sodium salicylate—by those familiar with this new drug, but personally I believe that excisions with wide margins and with care that the abnormal tissue is not brought into contact with the normal form our best and quickest cure of keloidal growths.

### *Radiotherapy.*

Roentgen's great discovery did not remain long the sole possession of the skiagraphers, but was soon shared by the dermato-therapeutists. Pusey, Allen, Stelwagon and Williams in America, Freund

and Schiff in Austria, Oudin, Barthelémy and Darier in France, and Walsh, Morris and Sequeira in England were the pioneers in this new field. Pathological study followed at once, and through these last ten years we have learned that the X-rays in therapeutic doses produce a slow degeneration of the elements of the skin which affects the nucleus as well as the cellular protoplasm. All layers may be influenced, and it is an interesting and fortunate phenomenon that tissues are modified in direct proportion to their complexity. Thus epidermic structures first feel the energy of these rays and yield most to their power, while collagen, elastin and muscle remain somewhat passive to their influence. Beyond a certain degree of dosage inflammatory reaction occurs and dilatation or even new formation of vessels and extravasation of cells and of serum result, followed by proliferation of connective tissue. In the case of malignant tumors this growth of collagen progresses centripetally and tends to encapsulate the tumor mass, while the tumor cells themselves undergo degeneration and necrosis.

When these rays are focused on hairs a weak exposure produces only a constriction in the shaft, a medium dose breaks the hair gradually with a pointed fracture, but strong radiation causes an immediate and blunt break.

Enlarging on these fundamental pathological properties, we find that the X-rays in sufficient doses produce an atrophy of all the appendages of the skin, degeneration and eventual disappearance of glandular cells, and retardation in growth or at times destruction of bacteria. In moderate doses the rays act as a stimulant of metabolism and as an anodyne, while in heavy or long continued amounts they produce destruction. Bearing these facts in mind, one can well understand the beneficial effects which dermatologists have obtained in hypertrichosis, acne vulgaris, sycosis, ringworm, favus, seborrhœa of the face and hyperidrosis; in lupus vulgaris, chronic eczema, psoriasis, lupus erythematosus, lichen planus, granuloma fungoides, cancer, sarcoma, tuberculosis and rhinoscleroma; and finally in urticaria, pruritus and hyperæsthesia of the skin.

In addition let me add a word as to the possible use of these rays as an adjuvant in opsonic treatment. Workers in this field have found striking rises of the opsonic index after exposure of the diseased skin to the X-rays, and they believe that the rays liberate in the tissues substances equivalent to doses of autogenous vaccination. In fact this revelation may be our best explanation of the beneficial effects of the rays.

From a personal point of view I regard the X-rays as the greatest single blessing which has ever been bestowed upon dermatology, with the exception of mercury, but unfortunately there is a reverse side to this great and valuable therapeutic ally. We have all encountered the persistently painful and not infrequently fatal effects of over-doses of Roentgen rays. Pathologically, we know these frightful ulcerations to be due to endarteritis and to the consequent necrosis of the tissues. With this knowledge in mind, don't let us waste precious time in trying to cure such destructions with ointments, but advise at once a radical surgical extirpation of the diseased focus, followed by a skin graft. By such procedures relief from pain and even permanent cures have been established. When epitheliomata have resulted from overdoses of these rays, immediate surgical interference should be undertaken.

In 1896 Becquerel discovered the radiant energy of uranium, and soon after the Curies separated radium and polonium from pitchblende. Not many months elapsed before dermatologists began their investigations upon the possible applicability of this new source of light to the cure of skin disease. From its compact size and isolation this new form of radiant force was felt to be peculiarly adapted to the treatment of cavities and pockets of disease to which it was difficult to introduce or to confine the X-rays. Wickham, Hallopeau, Danlos, Gastou, Bécclère in France, and Abbe, Williams and Morton in America have been the enthusiastic supporters of this method of treatment, and the recent publications of Wickham and Degrais of the Paris Laboratoire Biologique de Radium reveal the successful therapeutic possibilities of this extraordinary mineral in destroying epithelioma of the eyelids, nose, ears and mouth, lupus vulgaris, nævus vascularis and keloids; in curing patchy eczema and psoriasis; and in calming the severe pruritus of neurodermite, lichenification and eczema.

The present method of applying radium in capsules or incorporated in varnish forms one of the distinct therapeutic advances of the day.

The power of penetration of the gamma rays of radium is equal to that of the Roentgen rays, and their destructive action is equally powerful, for these two forces are now supposed to be similar, i. e., vibrations of ether. To employ these rays alone one interposes a screen of aluminum which prevents the passage of the alpha and beta rays which are more rapid and superficial in action, but relatively "harmless atoms" (Wickham), which do not exist in X-rays.

To reverse this action and diminish the quantity of the slowly acting, insidious, penetrating gamma rays, unnecessary superficial processes, one must obtain a radio-active substance poor in these rays.

Pathologically, radium tends to destroy bacteria and to absorb previously formed tissues and reduce them to their embryonic state. Later the fibrous and elastic elements begin to grow again and produce a soft, smooth, non-pigmented scar composed of thin, delicate, regular layers of epithelium, collagen and elastin.

### *Electrotherapy.*

The development and therapeutic adaptation of the high frequency current should receive perhaps our first recognition in this chapter.

This method of treating skin diseases was probably first introduced by Morton, but Tesla, d'Arsonval and Oudin have left an indelible impression in the history of the development of this procedure. The high frequency current consists of a violent bluish discharge produced by the frequent alterations of a high potential current. The pathological effect of this bluish discharge is to produce a transient or more permanent hyperæmia, and its advocates claim beneficial results as a stimulant in chronic eczema, acne vulgaris, alopecia areata, inveterate psoriasis, lupus erythematosus and kraurosis vulvæ; as a destructive agent in warts, nævi, molluscum contagiosum, rodent ulcer and lupus vulgaris; and finally as a sedative in pruritus.

A second branch of this subject is franklinization, the use of the static current. This form of electrical discharge improves the vessel tonus in the sense of vaso-constriction, and produces a disappearance of existing inflammation and a recession of œdema. Winkler recounts some brilliant results in the treatment of lupus vulgaris by the combined methods of destruction by soft X-ray tubes and subsequent franklinization.

The third division of electrotherapy is treatment by electrophoresis, the introduction of drugs into the skin from the negative or from the positive electrode of a battery, using ten to twenty milliamperes of current for ten to thirty minutes.

Cataphoresis has been employed for some years, and Ehrmann and Gärtner in 1899 recorded experiments by ionization with bichloride of mercury in syphilis, and later Leduc with chloride of zinc in lupus vulgaris and in epithelioma, and Volk with the same metallic salt in lupus also.



Baum has demonstrated more recently that ana- and cataphoresis are both possible and beneficial. From the anode he found that he could force into the skin corrosive sublimate, cocaine, lithium, methylene blue, quinine and atropine, while from the cathode salicylic, acetic and chromic acids, ichthyol or arsenic.

As drugs tend to be eliminated in part by the cutaneous glandular system, we see that this method, if employed successfully, is peculiarly adapted to follicular troubles such as sycosis, ringworm and cheilitis exfoliativa.

### *Actinotherapy.*

Finsen's name is forever associated with this branch of our science. Finsen's lamp, which originally depended upon the light of the sun, soon gave place to Reyn's modification, which made use of the arc lamp which is not only always at our service, but which also proved richer in the essential acting rays. Lortet and Genoud introduced a smaller but somewhat similar lamp, which cost far less to install and much less to operate, and produced its effects with greater rapidity, but its penetrating power proved so slight that its sphere of usefulness necessarily became limited to superficial dermatoses. The relative expense of operation of these three lamps may be inferred from the fact that the Finsen lamp requires 80 amperes, the Reyn modification 20, and the Lortet and Genoud 5 to 15.

Mention must be made of the other lamps which ingenious men have invented. Bang introduced hollow iron electrodes which are rich in erythema-producing rays. The Görl, the Leduc and the Piffard lamps emit sparks between several closely contiguous metal electrodes, and these sparks are laden with ultra-violet rays, but very deficient in penetration. Still other lamps are provided with parabolic reflectors which permit of wide but superficial radiation. Kromayer's name is chiefly associated with the quartz lenses which he claims have, in his hands, the power of producing rays with a penetrating power thirty times greater than those of the Finsen-Reyn instrument, while the superficial effect is so strong that it must be tempered by methylene blue. Kromayer insists that this light is the very best ever produced for the treatment of many of the diseases amenable to the influence of light.

Pathologically these many forms of light depend for their action upon the actinic rays—those at or beyond the violet end of the spectrum, but unfortunately these same rays have the least penetrative power. Exposure to these rays stimulates cell nutrition, produces

inflammatory reaction and destroys bacteria at a depth of 1.5 mm. if the tissues have been exsanguinated. Compared with X-rays these emanations have greater bactericidal qualities, but the X-rays can penetrate deeper and can be used effectively over far larger surfaces.

Jansen and Delbanco describe the effect of the Finsen apparatus in these words: "The first visible signs are dilatation of vessels with ensuing œdema, cellular necrosis and crust formation attended by demarcating inflammation with leucocytic emigration and subsequent active regeneration." The œdema is most prominent superficially, the intercellular spaces being widened and the cells themselves becoming spongioid. In lupus vulgaris the epithelioid and giant cells undergo this same vacuolization. Collagen shares the same œdematization, its fibers becoming swollen and separated. Finsen light is thus, in truth, a caustic but fortunately selective in its action, destroying the pathological cells and sparing relatively collagen and elastin.

Among the many diseases which yield to a greater or lesser extent to actinotherapy may be mentioned lupus vulgaris, chronic patches of lupus erythematosus, of eczema and of psoriasis, varicose and venereal ulcers, telangiectases and nævus vascularis, acne rosacea and vulgaris, sycosis, furunculosis, folliculitis decalvans and alopecia furfuracea and areata.

### *Hydrotherapy.*

Much is now written about the value of hydrotherapeutics in internal medicine, and dermatologists have not failed to try its effects in many of the generalized chronic dermatoses which we are prone to believe must arise from some error of metabolism. Strangely enough, this branch of therapeutics includes treatment by light as well as by water, and should therefore be described in this connection.

Dr. Hyde has interested himself much in the effect of sunlight upon the human body, and you will all recall his admirable résumé of the subject. The Germans more than other nations have recognized the healing action of the sun, and you all know of their institutes where men and women spend the greater part of the daylight hours out-of-doors scantily clad. Freund summarizes this action of light in the following manner: Light irritates the skin and produces inflammation; it acts directly on the blood and the blood vessels; with intense exposures over wide areas it attracts great quantities of blood to the surface and empties deep organs; it induces an escape of sweat; it modifies metabolism; it influences the mind; it

exerts an antiparasitic power; and in overdoses it produces serious disturbances.

Under such circumstances one can well appreciate the important possibilities and functions of the modern powerful light cabinets which find their place in up-to-date hydrotherapeutic establishments. In addition we have the effects of medicated tub baths, the Scotch douches, the needle baths, et cetera, all of which certainly exert superficial and deep influence on the human organism. In my own experience I feel convinced that cases of widespread eczema and psoriasis, pemphigus, dermatitis herpetiformis, scleroderma and dermatitis exfoliativa have been somewhat benefited by this combined treatment of large doses of heat, light and water, chiefly, I believe, by the great stimulation of the general circulation.

### *Organotherapy.*

In dealing with the functions and secretions of the ductless glands we are treading on speculative ground to a large extent, but the researches and experiments of Sajous, Schäfer, Gentès, Mulon, Crile, Cyon, Cajal and Andriezen certainly give us food for thought.

These internal secretions are derived from the pituitary body, the thyroid and parathyroid glands, the adrenals, the leucocytes, and in our growing years from the thymus. It is an accepted truth, I think, that myxœdema, cretinism, and Basedow's disease are associated with changes in the thyroid group; that Addison's disease follows disorders of the suprarenal glands; while Bogolepoff and others have found at autopsy atrophy of the thyroid gland in pityriasis rubra of Hebra, adenoma of the thyroid in pemphigus foliaceus, adenocarcinoma of the thyroid in dermatitis herpetiformis, lymphosarcoma of the suprarenal capsules in pityriasis rubra of Hebra, and atrophy of the same organs in erythrodermie exfoliante.

Sajous states that removal or disease of the pituitary body causes lowering of the temperature and of blood pressure, rapid emaciation, dyspnœa, coma and death, and that hyperæmia and hypertrophy of this organ produces acromegaly. There is no evidence that the pituitary body has a secretion, but the organ is connected by nerves with the thyroid group and with the adrenals. The secretion of the suprarenal capsules is accountable for hæmoglobin which carries over 90% of the oxygen to the tissues, and hence with destruction of these glands we have lowered temperature and blood pressure, arrest of nutrition, emaciation and death. Adrenalin ex-

tract, therefore, raises temperature and blood pressure and enhances oxygenation and metabolism. Zülzer and others have found that adrenalin has the physiological task of mobilizing the sugar from the liver and probably also from the other tissues. This knowledge may mean much to us in future in the treatment of cutaneous diabetes. The thyroid and parathyroids exert their salutary effects by the production of iodothyrene, which neutralizes the toxic properties of nitrogen metabolism in the blood. This secretion activates metabolism in two ways, i. e., by increasing the excitability of all cells and by exciting the governing center of general metabolism. Sajous expresses this theory by the axiom that thyroid secretion increases the autoprotective activity of the blood by increasing its opsonic power.

Adapting these theories to commonplace therapy, we know that the internal administration of thyroid extract restores the dry, coarse hair, the wizened skin and the brittle nails of myxœdema to comparative health, and again that injection of adrenalin contracts capillaries and is useful in the treatment of erythema multiforme, urticaria and purpura.

### *Psychotherapy.*

This branch of therapeutics is certainly a difficult one to approach from a purely scientific point of view. Probably every century of civilized life has encountered some contemporary cult which has undertaken by purely mental tactics the cure of disease. To-day it is "christian science" which plays an important rôle in human activities, especially in England and in America and, I think, none but a thoroughly sceptical and unreceptive mind can deny that this "faith hath made many a man whole" who has honestly obeyed a physician's advice without success. Within the last two years we in Boston have heard much of Dr. Worcester's work at Emmanuel church. This form of "mental healing" is not practiced by men and women utterly ignorant of medicine, but is employed by an earnest, sincere clergyman and his colleagues upon suitable patients carefully selected by some of Boston's best-known physicians. Results have been closely watched, and it is only just to state that many brilliant cures have been attained. Personally I incline much to the efficacy of such seemingly radical measures. In these days when we hear so much of toxins and autotoxins and the great power for evil these occult substances can bring to pass in the human body, I believe that it is only fair to admit that the restoration to health of a dis-



ordered mind can exercise great power for good in the internal economy. Those of you who have suffered from dyspepsia know how quickly your mind is depressed, how "blue" you become, how physically exhausted you grow when a fresh toxæmia arises from the ingestion of some indigestible food. Conversely, you know also how a change of scene, a sudden freedom from care or anxiety, a shifting of your habitat from irritating surroundings to the house of a cheerful friend can restore your equilibrium and drive away and dispel even a severe attack of dyspepsia. This rapid change is purely the result of the influence of "mind over matter," and so I believe one can in truth extend this theory to other apparently graver disorders than dyspepsia, and consequently we should include modern psychotherapy, practiced by an honest, medically educated, mentally capable man, among the blessings of contemporaneous therapeutics.

#### *Congelation.*

This method of treating skin diseases began in 1900 when Dethlefsen introduced congelation by ethyl chloride. Almost at the same time Dade began his pioneer work with liquid air, and in 1905 Juliusberg continued these valuable experiments with carbon dioxide. Each and all of these substances have proved their worth and have established a lasting place in our armamentarium. They all act in the same manner and produce similar pathological sequelæ. Ethyl chloride is of course a comparatively mild refrigerant, but carbon dioxide with a temperature of minus  $90^{\circ}\text{C}$ . and liquid air with a coldness double that of carbon dioxide are naturally formidable weapons which should be employed only by those expert in their use. Ethyl chloride and carbon dioxide are easily obtained, comparatively cheap and durable substances, but liquid air, on the other hand, is a precious fluid because difficult to obtain and impossible to keep for more than a few days. Ethyl chloride is used in the form of a spray by us all, carbon dioxide is employed in a similar manner by Juliusberg, but in the shape of snow by Pusey and his followers, while liquid air is applied on a cotton stick by Dade and others who are fortunate enough to procure this extraordinary substance. The duration of exposure and the amount of pressure exerted in the latter methods determine the effect of these three agents. Refrigeration by ethyl chloride requires from five to ten seconds, is very superficial, is quite transient, and is followed by no visible secondary reaction unless the freezing is prolonged for some time. One second's application of carbon dioxide produces a

freeze of twenty to thirty seconds' duration. One minute's exposure to this spray is followed twelve hours later by inflammatory redness and vesicle formation. Ten seconds' medium pressure from liquid air induces solid congelation succeeded, sometimes within a half hour, by the production of a bulla. These figures vary much according to the tissue subjected to the influence of these three substances, thin cicatricial skin requiring a minimum exposure, while, tough, raised, pigmented, hairy moles, will tolerate much greater doses.

Pathologically, the changes produced by ethyl chloride, carbon dioxide, and liquid air are the same, granted that the degree of refrigeration has been of equal amount. These effects are comprehensively stated in the following quotation: Juliusberg\* excised one piece of normal skin immediately after freezing, and a second piece fourteen hours later. In the first piece the only change found was in the vessels which were filled with thrombi. From the second piece it was evident that the results of freezing were progressive and widespread. The whole epidermis had apparently undergone a homogeneous destruction. A few cells of the basal layer still retained unaltered nuclei, but otherwise the remaining structures had entirely disappeared, leaving empty, clear spaces in their place. Below the epithelial layer was a band of polynuclear leucocytes. There were also masses of leucocytes scattered about among the swollen and hypertrophied connective tissue cells. The lymph spaces were dilated and filled with a homogeneous substance. The blood vessels were also distended, occluded by thrombi and surrounded by a leucocytic infiltration. The whole connective tissue was permeated by a network of fibrin which, in the papillæ, was arranged in orderly coils.

And now what is the practical side of this question? From my own experience I have learned that the application of ethyl chloride, first recommended by Howard Morrow, in severe cases of herpes zoster is a godsend. The intolerable pain, frequently encountered in old persons and formerly often a menace to life, is allayed by freezing the spinal seat of the disease twice daily, and by local chilling of the cutaneous lesions when discomfort demands this procedure. In the treatment of other diseases we at the Massachusetts General Hospital usually employ carbon dioxide or liquid air, for their effect is more rapid and far reaching.

Acne vulgaris, sycosis, ulcer varicosus, X-ray dermatitis, lupus vulgaris, epithelioma, lupus erythematosus, keratosis senilis, verruca, nævus vascularis, pigmentosus and pilosus have all been treated by

\*H. P. Towle, *Résumé* in Boston Med. and Surg. Jour. June 4, 1908—p. 268.

numerous clinicians with varying success, and from my own observations at the skin clinic of the Massachusetts General Hospital I feel justified in stating that there is no better treatment for verruca, herpes zoster and all forms of nævus of any considerable size than by refrigeration by one of these three new therapeutic weapons.

### *Hyperæmia.*

The idea of curing maladies by bringing a maximum amount of blood to the focus of the disease is not a new one. Physicians have made use of poultices and cups for ages, and we have seen in our chapters on drugs, on electrotherapy, on actinotherapy and on hydrotherapy the value of this method in the cure or amelioration of various dermatoses. But the experiments of Bier have recently brought this subject in a striking manner to our eyes.

Experimentally, Müller and Peiser found that the pus of abscesses, furuncles and carbuncles contain polymorphonuclear neutrophiles which harbor an enzyme capable of dissolving the tissues—a proteolytic ferment. To combat this action it is wise to add an anti-ferment, and this can be obtained from the serum of the patient or from another individual. An easy method of introducing an autogenous antiferment is to bring more blood to the focus of the disease, and this experimental evidence gives us a probable clue to the value of the so-called Bier treatment and to the same results obtained by the other methods to which I have referred in this paper.

To induce obstructive hyperæmia one can employ a tourniquet, to produce active hyperæmia by mechanical means one can make use of the von Esnärck bandage followed by a sudden release of this pressure, or one can apply wet or dry cups.

In recent years we have heard great encomiums bestowed upon these methods in the treatment of ulcers, chronic eczema, acne vulgaris, old plaques of psoriasis, scleroderma and onychia. Without wishing to disparage the work of others, I feel bound to declare that in my hands, perhaps through lack of proper experience in technique, these mechanical methods of inducing hyperæmia have never convinced me of their superiority over other forms of treatment.

### *Serum Therapy.*

This huge subject, at present so theoretical but still so pregnant with future limitless practical possibilities, seems almost too vast for us to attack at the end of this long dissertation on accomplished facts in dermatological pathology and therapeutics. The

purely scientific data in regard to agglutinins, antitoxins, antien-dotoxins, bacteriolysins, coagulins, and precipitins cannot be described here, but it seems proper to record the various sera which have been devised and which have scored more or less success in the hands of their makers.

*Acne vulgaris.* Unna, Gilchrist, Hodara and Beck believe in a special organism as the cause of this disease, while Sabouraud claims that the acne bacillus only paves the way, producing seborrhœa, to which is added the staphylococcus albus butyricus, the symbiosis resulting in acne. Gilchrist was the first to grow the bacillus of acne and states that the serum of acne patients agglutinates these bacilli. Many other men, recognizing the important rôle which the staphylococcus epidermidis albus plays in the formation of acne lesions, have vaccinated their patients with culture products from this organism, sometimes with brilliant and sometimes with negative results. In conjunction with these injections advantage may be obtained by applying X-rays to the seat of disease, the resulting congestion bringing more opsonins to the diseased glands.

*Acne rosacea.* In the congestive stages of this affection opsonic treatment (again with staphylococcus epidermidis albus vaccine) has produced favorable results frequently, but in the hypertrophic cases I am convinced that the best treatment is the knife, by which the deformity is whittled down to the desired shape.

*Ambustio.* Petit has recently described the value of hot horse serum in the management of burns, and has demonstrated the fact that in different areas on the same individual those treated in this way are more comfortable and heal faster than those dressed by any of the older, unsatisfactory methods. Petit believes this hot serum revives many of the injured cells so that they recuperate and aid in the healing process instead of dying and generating poisons; and furthermore, that this serum summons leucocytes to the seat of the injury.

*Carbunculus, furunculus, coccogenic sycosis.* In these three conditions, which practically all men agree are produced by the staphylococcus, we have a really accepted specific, I think, in the staphylococcus vaccine. In my own practice, I know what a blessing this serum has proved in numerous examples of these hitherto often intractable diseases. Nevertheless, there are exceptions to this rule as to all others.

*Carcinoma.* Crile, Kelling, Beebe, Clowes and Wile are among the investigators who have been most active in experimentation with



cancer serum. These men have found that the blood serum of a cancer patient may hæmolyze normal corpuscles, but normal blood serum usually does not hæmolyze the red corpuscles of a cancer patient. Crile found this test to be true in 82% of 80 cases of carcinoma. In the remaining patients the disease was too far advanced to produce this reaction.

Adamkiewicz has evolved a serum which he calls *cancroin* and which he claims contains the toxin of cancer cells. This resembles chemically hydrate of trimethylvinylammonium, and when injected into a cancer produces a shrinking of the pathological cells with the formation of *lacunæ*, a small cell infiltration and a production of fibrous tissue.

Coley also records cases of improvement following the use of his mixed serum (*vide infra*).

*Diphtheria.* The value of diphtheria antitoxin in the treatment of cutaneous cases of this disease is too well known to need further mention here.

*Erysipelas.* Marmorek's anti-streptococcus serum in 10cc. doses has been used with a certain degree of success in the treatment of this disease. Laplace has found in vitro that streptococcus of Fehleisen grows less vigorously in acid media than in neutral or alkaline soils, and so recommends the addition of 5% of hydrochloric acid to a  $\frac{1}{1000}$  solution of corrosive sublimate. But despite these scientific data the dermatological world still places its greatest reliance in ichthyol in combatting this specific invasion of the lymph spaces.

*Glanders.* Martel, adopting the von Pirquet technique in the use of mallein (the prepared product of the bacillus of glanders), records a distinct cutaneous reaction in three cases of human glanders, while all controls proved negative.

*Lepra.* Carrasquilla's serum is well known to all, but many experimenters, including Arning, Buzzi, Herrmann and Abraham, have denied the usefulness of this substance in the treatment of leprosy.

Rost claims to have cultivated the Hansen bacillus and to have used successfully the resulting product which he calls *leprolin*, but this statement apparently remains unconfirmed by others.

Deycke-Pasha and Resched-Bey have devised a fatty body which they call *nastin*. This is a little known substance and is produced by incubating a small leproma in sterilized water for a few weeks. A small streptothrix resembling the lepra bacillus is found and extracted and mixed with benzoyl-chloride. Injection of this

standardized product brings about reactions in the leprous quite analogous to the reactions of tuberculin in the tuberculous. The inventors claim for nastin considerable prophylactic powers, and when injected into fresh or early cases of leprosy amelioration of symptoms and even cures. Hartigan tried this material in one case, and after two inoculations the leper noted a diminution and desiccation of his lesions and a better feeling and a better appetite than at any time during the previous five years.

*Purpura.* Encouraging reports of successful treatment of this sometimes serious condition have been made by Crile, who has transfused whole normal blood, and by Kohler, Weil and Leary, who recommend the subcutaneous injection of 30cc. of fresh rabbit serum.

*Rhinoscleroma.* Erben has used successfully in combatting this rather uncommon malady a serum derived from immunized guinea pigs. In his experiments he found this form of serum far more powerful than that from cultures of the rhinoscleroma bacillus. I think, however, that X-ray treatment has still more adherents at present.

*Sarcoma.* In describing the serum treatment of this almost uniformly fatal disease one should give precedence to the work of Coley commenced in 1891 and continued by its originator and by others up to the present time. Coley's most recent statistics are as follows: Out of thirty-six cases of inoperable sarcoma and carcinoma treated by his latest formula in the production of his mixed toxins of streptococcus and bacillus prodigiosus, twenty-one have remained alive between five and thirteen years, and twelve others between one and five years—surely a striking record.

Crile and Beebe have recently devised another method of treatment. By overbleeding tumor dogs and then overtransfusing from immune dogs they have been able to cure nine of ten of these animals, some of which were cachectic and showed metastases. These same authorities have repeated these experiments in six human patients. Their tumors were first excised and normal blood was transfused. These tumors were of the round or spindle cell varieties (the most malignant types), and after sixteen months the patients were alive and apparently free from recurrence, and Crile and Beebe hope that they may become an immune source from which to derive blood for the cure of others.

*Syphilis.* Here again is another disease in which science has given us a specific serum capable of divulging very accurately (80-90%) the nature of evident or obscure cases, but as yet incapable of use as a curative agent. Romme, however, states that syph-

ilitic serum contains a specific antitoxin whose presence is proved by its peculiar power of attracting to itself the syphilitic poison and alexin of the hæmolytic serum, and this fact should lead to the production of a vaccine.

In this place it seems fitting to pay tribute to the splendid achievements of Schaudinn, Hoffmann, Neisser, Metchnikoff, Roux, Wassermann and Bruck in this all-important branch of human knowledge.

*Tuberculosis.* Once more in this chapter we must record great and invaluable diagnostic advance in our study of disease, which, alas, has not as yet been accompanied by corresponding therapeutic progress. The successful subcutaneous, cutaneous and ophthalmic use of tuberculin devised by Koch, von Pirquet and Calmette respectively as a diagnostic agent is an undeniable fact, but unfortunately the curative effects of this substance do not stand on so firm a foundation despite the continual employment of this material by many therapeutists of the present day.

I have now, gentlemen, reached the end of my conception of this year's topic for discussion, and in closing I must crave your pardon for encroaching so very long on time which, I know, could have been more profitably spent on your discussion rather than on my presentation of the subject.

## SYPHILIS IN ITS RELATION TO GENERAL PARALYSIS OF THE INSANE \*

BY ANDREW P. BIDDLE, M. D., Detroit, Mich.

**D**URING the last decade or more the interest of the members of the American Dermatological Association, as shown in its Annual Transactions, has been directed more to the mechanical and laboratory sides of the study of dermatology than to the academic consideration of the various other problems which have confronted us. The advances which have been made and are being made in dermatology, the contributions to the science of medicine made by the extensive researches and technical skill of the laboratory worker has been the equal of any of the other branches of medicine. Dermatology deserves to share with her sister departments the glory of the achievements of the last decade. Yet there are many problems still unsolved, many to which we as clinicians must add our mite to the fund of general knowledge and our energy to their solution. For this reason I would take you away from the field of the definite and positive into the realm of the speculative and ask your kindly consideration of a phase of syphilis in a sense broader than the contemplation of its cutaneous and muco-cutaneous manifestations, which after all form so small a part of the symptoms complex and the serious aspects of the disease. And in this I incidentally make an earnest plea for a broader and more comprehensive consideration of our limited field of activity in its relation to general medicine. We would be the gainer both by the experience and by personal renumeration by the study of the patient upon a broader basis, were we to qualify as expert interpreters of other symptoms than the mere cutaneous ones. My own experience as a consultant has in not a few instances taught me that this lack of a more intimate knowledge of general medicine has rendered my worth as a consultant of far less value than I could have wished. Our studies even in this Association should to my mind be placed upon a more comprehensive plane. We should in addition to the technical side

\* Read before the 32d Annual Meeting of the American Dermatological Association, Annapolis, September 25, 1908.



consider the disease also more in its relation to the other physical, moral and mental conditions of the patient. And not a little of our failure comes, I believe, from the lack of the constant study of general medicine.

I am well aware that in the field of research suggested by the title but little progress has recently been made; yet to my mind no antagonist is more worthy of our steel of investigation than this foe, so destructive to the physical and mental powers of the human race.

At this writing there lies on a bed in St. Mary's Hospital in my service a woman, aged 27 years, in a state of melancholia, too tired, too languid to make any effort to rise, indifferent as to her surroundings, except as they may affect her morbid thoughts, dwelling with more than ordinary emphasis on her past ability and present inability to work and on her great personal loss by the recent death of her only sister; easily roused to consciousness and her surroundings, yet quickly relapsing into her own melancholic thoughts; with almost immovable and slightly unevenly dilated pupils; with incoherency and slowness of speech and complaining of constant, indefinite headaches; with a daily slightly rising temperature, an increased heart's action and a tremulous tongue; with syphilitic landmarks, telltale scars upon the legs, the chest and the back. With such a physical definition of congestion of the brain, with a history of an infection about three years previously by her husband, with a tendency to headache during the early stage of the disease and a previous attack of congestion of the brain some two years ago and a subsequent careful course of treatment by a competent physician during which time she was in good health and able to earn a livelihood, and now a relapse, what can prevent the probable inevitable trend to a fatal ending?

I believe that it is the experience of all of us under whose care the syphilitic falls that we may look with confidence for the cure of the patient, in so far as he or she may after a fixed number of years of well directed treatment safely marry and be the father or mother of healthy children. We know that syphilis like the other infectious diseases varies in its intensity and that not a few of the afflicted apparently recover if not treated at all; we judge from our experience that the large majority of intelligently and properly treated live to enjoy good health. Yet the records of our insane asylums show that proportionately the number of paretics is on the increase. With such records constantly before them medical super-

intendents of asylums view with awe our optimism. Are we wrong and they right? Do such a large number pass from our hands in apparently good health to be found later in life in the asylums?

While we recognize the value of the well directed, scientific treatment of the syphilitic, by such methods as in the judgment of his physician may seem best suited to his needs or best meets with the experience of the physician; and while we know that the patient who either by his own ignorance or indifference as to his habits, or who, because his condition has remained unrecognized, has failed to receive a properly directed treatment is more liable to develop the late syphilitic and parasyphilitic manifestations, is there in our properly handled cases anything more which can be done to prevent this fatal ending?

We well know that in the alcoholic, the debilitated; in him of unstable nervous system, whether acquired by inheritance or incurred by disease; in early youth and in him of advanced years, the influence of syphilis upon the arterial system and the nerve centers is more pronounced, and that this condition influences the nutrition of the brain, which malnutrition leads to degeneration and ultimately to mental deterioration and insanity. We all have observed that the negro and other dark races are less prone to syphilis of the nervous system; that this form is more prone among syphilitic men than among syphilitic women, probably on account of the former's addiction to drink and sexual excesses; that it occurs more frequently between the ages of 35 and 40, but that with advancing years the tendency becomes greater and the disease usually appears at a comparatively earlier date. But aside from these general observations there is nothing in the character of the initial sore, the early lesions, the earlier nervous symptoms which give a key to the future. While the neurotic or neuropathic patient may suffer more acutely from headache and neuralgia from the onset, he does not necessarily suffer from the later grave lesions of the brain. While judicious treatment may relieve the early nerve symptoms, it gives no guarantee of the absence of later brain lesions. While it is impressed in the reports of almost all superintendents of asylums that the cases of general paralysis of the insane usually give a history of the lack of well directed treatment or of no treatment at all, and that this lack is to their mind an important factor in the causation of the general paralysis, many thousands of cases after well directed treatment have found their way into our asylums.

By permission of the Superintendent of the Eastern Michigan

Asylum I quote from the advanced sheets of his report for the year ending June 30, 1908:

	Total admissions		paretics		percentage	average
To June 30,						
1907	male-female		male-female		male-female	
	225—135 90		15 5		11. 5.15	8.9
To June 30,						
1908						
	288—155 133		24 2		15.5 1.5	9.

Which condition represents fairly the percentage of paretics among the insane inmates. Yet it is difficult to get uniform reports, as so many circumstances, not infrequently local conditions, increase or diminish the relative proportions. Quoting from numerous sources from the reports filed in the library of the Surgeon General during the last 40 years, I find that the statistics of the Worcester Lunatic Hospital give for the years 1867-71 and the years 1891-96 the same percentage 5.5 to 5.6. Of the total number of admissions in the State Hospital system of New York State for thirteen years (1889-1901) of 49,787, there were 3307 paretics—6.6%. In a total of 330 admissions to the Taunton, Mass., State Hospital for the year 1905-06 there were 39 cases of paretics, over 11%. The 172 cases of general paralysis observed in the Connecticut Hospital for the Insane during a period of seven years (1898-1905) represented a yearly percentage of 5.4 to 7.8. In the Toronto Hospital for the year 1907 to the month of August the average was 6%. For the 12 years (1899-1901) the Kharkoff Zemskoi Hospital gives the following:

Total						
admissions		paretics		percentage	average	
male-female		male-female		male-female		
4759 2331 (7090)		684 116 (800)		14.37 4.97		11.28

In other parts of Europe the figures give even a higher percentage, particularly in Berlin and Munich, in which cities the male paretics average 36% to 45% respectively; but this may be due in part to a relatively smaller percentage of other forms of psychoses.

It is generally recorded that the proportion of male to female

paretics averaged 1 to 7, due probably, as already stated, to important factors other than syphilis entering into the causation of general paralysis, as alcohol and sexual excesses. All reports, however, emphasize the strong influence of urban life upon the origin of dementia paralytica. Of the insane coming from the rural districts the paretics represent 1% to 2%, while in the urban centers the percentage reaches as high as 10% to 16% and even higher. The proneness to the development of general paralysis accredited to certain employments would seem to be due rather to the physical and moral condition of the patient than to his employment, especially to his addiction to excessive drinking and sexual excesses, but primarily to his having acquired syphilis. Neither the members of the learned professions, neither teachers, students, musicians, actors nor the members of any of the trades appear to be especially susceptible; nor does intellectual work, nor work of any kind, seem to predispose to paresis, when the health of such individual has not been undermined by hereditary influences or excesses.

Marked variations naturally exist in the estimation of recorders of the relative importance of syphilis in the causation of the numerous psychoses, for all are not equally quick to recognize the stigmata of syphilis; a fair estimation would be 5% to 12%. But no discussion of the etiology of dementia paralytica is ever entered into without the chief interest being centered in the relationship syphilis bears to its causation. Figures in which various observers have obtained a history of other evidence of syphilis vary from 1.6% (Voisin) to Kraepelin (Heidelberg) and Gudden (Charité) in men 34.4%; to Graf 44%; to Gudden in women 45.3%; Erb 52%; to 94% (Régis), while Tchisch and others go even so far as to state that in their opinion syphilis either hereditary or acquired ante-dates all cases of paresis and, I believe, this is the opinion of almost all Medical Superintendents of Asylums. Even those who do not go that far, who do not admit that there can be *no* dementia paralytica without syphilis give to syphilis the prepondering influence in its etiology. Thus Peterson has determined that antecedent syphilis is 7 to 10 times more prevalent in paresis than in other psychoses, and Kraepelin (Heidelberg) notes that syphilitics are 17 times more prone to paresis than non-syphilitics (Defendorf).

An examination by me at this writing of the history of 34 paretics at the Eastern Michigan Asylum shows: 14 give a positive history of syphilis, 3 a probable one, and in 17 the history is either negative and no history is obtainable, giving about 50% of paretics with a history of syphilis.



Winfield (Brooklyn) in reporting his observations made in the Long Island State Hospital for the Insane and other institutions (1906) in reference to evidences of syphilis among paretics, states that there were 241 paretics examined in the six hospitals visited. All were examined for external evidences of syphilis irrespective of any history of this disease, and it was found that 165 or 68.48% had various scars and markings that were typical of cutaneous syphilis, and 76 showed no external evidences whatsoever. In looking up the Hospital history of the paretics it was found, however, that 28 of the 76 negatives gave an undoubted history of syphilis. If these 28 are added to the 165 exhibiting evidences of syphilis, there are 193 out of 241, or about 80%, that had had syphilis, and there was nothing to prove that the negative minority had not had specific infection.

Between October, 1893, and March, 1897, 255 male and 57 female general paralytics were admitted to the Rainhill, Lancashire, Asylum. Of these, 76 males and 9 females were excluded from examination as no history was available. Of the remaining 179 males, 62% had certainly been infected with syphilis: in 24%, though no direct evidence was forthcoming, still sufficient data existed for declaring that they probably had the disease; and in 13% no history of syphilis could be elicited, but at the same time the disease could not be altogether excluded. Of the 48 females, 37% were certainly syphilitic, 60% had probably had the disease, and in 2% no evidence was forthcoming. (A. W. Campbell, *Brit. Med. Jour.*, Lond., 1899, v. 2, pp. 704-706.)

Undoubtedly syphilis and the vices, stresses and strains associated with civilization and defective heredity are the causes of tabes dorsalis and general paralysis of the insane. Of the contributing causes to this and to all psychoses are long-continued and severe brain strain or head injury, and above all alcohol in excess, entailing vascular and nervous changes in the cerebral cortex and leading to the production of degenerative changes of definite structural kind, especially in a nervous system unstable by inheritance or disease; changes leading to thickening and opacity of membranes, sclerotic lesions in vessels and fibrous tissues; but it is questionable if any of these factors in itself alone, excepting possibly defective heredity, ever produced dementia paralytica.

The lesions characteristic of the arterial changes and the gumma of late syphilis differ not only in their histological structure from the lesions which characterize tabes and general paralysis of the

insane, but also as to their developmental period after the primary infection and their behavior in regards to their response to anti-syphilitic remedies. It is the consensus of opinion that these remedies have no efficacy in the treatment of dementia paralytica. The developmental period of arterial and gummatous lesions, even of the nervous system, may be as early as the first year of syphilitic life, they attaining their maximum of development after the third year. Tabes and general paralysis seldom develop earlier than the 6th year, with a maximum period of frequency about the 15th year. Variations, however, are between the wide limits of 2 and 33 years.

"Dementia paralytica is a chronic progressive psychosis of middle life, characterized clinically by progressive mental deteriorations with symptoms of excitation of the central nervous system, leading to absolute dementia and paralysis, and pathologically by a fairly definite series of organic changes in the brain and spinal cord, probably the result of acute intoxication." (Defendorf.)

Its diagnosis is, however, often extremely difficult. Its distinction from brain syphilis, from nerve sclerosis, chronic alcoholic insanity with organic brain changes, cerebral tumors and brain sclerosis, from acute maniacal excitement of a functional character and depressive forms of manic-depressive insanity, from neuræsthenia, dementia præcox, senile dementia may be impossible in the early stages of the diseases until the correlation of the mental and physical signs give to it a clearly defined clinical picture, further supported, if necessary for diagnosis, by lumbar puncture.

In this paper it is not to the purpose, however, to go into the differential diagnosis or the various forms and clinical features of the disease. Yet we should be ready to recognize the "defective memory and attention, weakness of judgment, emotional indifference, change of moral character with greater pliancy in conduct, and the physical symptoms, of which defective pupillary reaction is the most active. . . . Defective speech with slurring, inability to arrange syllables and words in proper order, and tremor of facial muscles, are almost sure signs of the disease." (Defendorf.)

The majority regard general paralysis as a toxæmic degeneration, the result of the circulation within the system of syphilitic toxins, which produce profound disturbances of metabolism and induce anatomical changes. The initial point of attack of these toxins is by no means agreed upon, whether upon the nerve fibers, nerve cells or blood vessels.

Mœbius and others hold that both tabes and dementia paraly-

tica are late manifestations of syphilis, comparable to the gumma, but Fournier and others classify it among the parasyphilitic diseases, "the characters of which are that they do not exclusively or necessarily depend upon syphilis for their production, and that they are not influenced by antisyphilitic treatment."

Nageotte finds that the characteristic lesion in general paralysis of the insane is a cellular infiltration in the walls of the minute blood vessels and in the perivascular lymph spaces of the cerebral cortex. The cells are of various kinds—lymphocytes, plasma cells, and mast cells. The accumulation of plasma cells and of numerous lymphocytes in the walls of the minute blood vessels and in the perivascular lymph spaces of the cortex are a constant and characteristic feature in general paralysis. In his clinical lecture on the etiological relation of syphilis to tabes and general paralysis of the insane (1906, *Clin. Stud. Edin.*, v. iv., pp. 97-118), Bramwell states that this perivascular infiltration of plasma cells belongs to the same class as the lesions which are certainly syphilitic. He (*ibid.*, pp. 137-149) views it, the lesion, as a chronic inflammation of the membrane and superficial layers of the cortex leading to sclerotic atrophy of the nervous tissues with an increase of the fibrous elements, neuroglial fibers and neuroglial cells. The walls of the minute blood vessels and the lymph spaces around the vessels are infiltrated with cellular elements.

Our laboratory workers have isolated a specific bacillus—the bacillus paralyticans—possessing morphological characters and staining affinities, which have led Robertson to apply to it the term "diphtheroid." It gains access to the system chiefly by way of the respiratory tract and the alimentary canal. This invasion of the blood, lymph and tissues gives rise to the production of toxins to which they claim the trophic, degenerative, convulsive and paralytic phenomena are due. It has been found by Robertson in bronchial, alimentary, genito-urinary mucous membranes, in the cerebrospinal fluid, in the brain, in the walls of the cerebral vessels; in the blood and in the urine. Langdon found it in the blood, cerebrospinal fluid, urine and urethral mucus of paretics in 3 out of 10 well marked clinically considered paretics out of 17 examined, and found it absent in the urine, pharyngeal and tonsillar mucus of healthy control individuals and of those of other psychoses (Langdon, 1906, *Am. J. Ins. Balt.*, v. 63, pp. 167-175). But Mott and others have failed to substantiate these findings.

No spirochetes have been found in any stage of the disease, and

this would accord with our present knowledge. Nor have Wassermann's serum tests given a reaction in cases of general paralysis of the insane positive enough for general application.

A careful review of the causes leading to the production of general paresis of the insane shows that the chief one is undoubtedly syphilis and that the problem for its control is very complex. The responsibility must rest with us who see the syphilitic in his early syphilitic life, for when he falls into the hands of the alienist, or enters the asylum, the damage is done, repair is impossible, and death within 2 to 6 years, or, if prolonged a life worse than death to his family and friends is certain. We should to my own mind extend in an appropriate manner a more general knowledge of syphilis to the public, should impress upon the syphilitic most emphatically the necessity of a carefully regulated treatment, and that he must carefully regulate his future life and habits so as to conserve his resources, and above all, avoid anything tending to irritate, to strain his nervous system. I think we all realize this, but perhaps most of us do not, as Fournier believes we should, extend mercurialization over a sufficiently long period of time.

Our hope may lie in the general theory of immunity characteristic of the exanthemata which applies equally to syphilis. The body defends itself by manufacturing specific anti-bodies with the aid of which the invading organism is repelled or the poisons elaborated by it are neutralized. To serum therapy, the production of specific anti-toxins in properly selected lower animals, or by the artificial cultivation and isolation of specific substances from the organism itself, it would seem that we might look for the solution. Wright's work with the opsonins and Vaughan's work with proteid residues make it a possibility that it is not unreasonable to hope that in the future a true specific treatment of syphilis may be discovered, which used in the early stages may minimize the injury to the nervous system and produce a cure before the injury is beyond repair. Again, the experimentation with the spirochæta pallida and the experimental inoculations with apes with syphilitic material may ultimately disclose the true cause or causes of general paralysis of the insane. This is our hope and to this we must bend our energy for a solution.



ANOTHER CASE OF HYPONOMODERMA (LARVA MIGRANS) DEMONSTRATING THE IMMEDIATE CURATIVE EFFECT OF CHLOROFORM INJECTED IN SITU.

BY M. B. HUTCHINS, M. D., ATLANTA, GA.

**T**HIS is the third case of this condition that I have seen. The two others were reported in the JOURNAL OF CUTANEOUS DISEASES. The first was stopped with a second injection, the second case had a multitude of the larvæ and I had no opportunity of carrying out the treatment. In the last case, reported below, the larva was killed and the process checked immediately, with the one injection.

Methods of treatment advised by authors are "hit or miss," uncertain and experimental. The chloroform treatment is specific. A clean hypodermic syringe and needle are used. If the chloroform shows contamination from solution of "verdigris" in syringe, renew until clean. The needle point is pushed into burrow to supposed site of the larva, from behind. Two or three drops of chloroform are injected. There is a burning sensation that may last some hours, but the itching and discomfort from the larva cease immediately. No necrosis follows treatment, only a little serous exudation and finally some horny desquamation.

This last was the case of twelve years old boy (from middle Georgia), robust in physique. Had been out barefoot a few times before the beginning of the trouble. There was first a small blister behind head of first metatarsal bone in sole of left foot a week or two before. Up to the day before he came to me the condition had been that of two adjacent slightly ring-like loops or circles, but with enclosed areas of dried vesicular lesions, this part resembling a recovering pompholyx. A somewhat looped line slowly formed, reaching to midway of the sole, raised, a miniature of a mole burrow, middle line yellowish from serum, slopes of burrow pink, a distinct vesicle where larva made his flying start. In the past twenty hours it traveled obliquely toward head of 5th metatarsal, and at this point made an obtuse angle, turning toward crease under root of little toe for one-half inch. At the visible end of the burrow was a vesico-pustule, size of a small shot. (Traveled two inches in twenty hours.)

TREATMENT.—The contents of the above lesion were carefully removed on a fine pointed lancet, introduced under supposed site of larva. Microscopic examination revealed nothing but pus and epithelial cells.

Two or three drops of chloroform were injected in line of progress for one-fourth inch. A piece of zinc oxide adhesive plaster was applied to this region. Two days later the site of injection showed as a one-half inch long blind "tunnel" under the epidermis, exuding clear serum. The larva had stopped when the chloroform reached it. Nine days later horny desquamation was taking place here while slight irritation and oozing showed from later infection of mid-sole part of track, over which the patient had been, without instructions, wearing adhesive plaster. This soon ended and there was no further trouble.

## BLASTOMYCOSIS CUTIS: REPORT OF TWO CASES.

By M. B. HUTCHINS, M. D., ATLANTA, GA.

THE locality of origin of the first of these cases and the fact that the second case occurred in a pure blooded negro seem to warrant their being placed on record. The report, briefly, follows:

CASE I.—Blastomycosis. (No opportunity to get specimens.) Male, white, age 25. Farmer, from mountain region of Georgia. Disease began in middle of base of left lower lid about eight months before, first "a small lump," gradually extended. Used some irritating "home remedies." When examined, the parts affected were the outer end of left upper lid, external to canthus, the whole lower lid was ectropic, slightly on nose and ending on inner end of upper lid. Area crescentic, finely papillomatous, the edge sharply defined and "warty," one-eighth to one-fourth inch thick, some scale crusting, and points of dried blood from patient picking the lesion. No pus could be pressed from between papular lesions—all dry. At one time there was suppuration. Occasional pricking or itching sensations. General health fairly good. Treatment: Plain and wholesome food. Saturated solution potassium iodide, beginning with 10 drops t.i.d. after meals, increasing 3 drops daily, to tolerance or painful iodism of skin. Locally, Phenol 95% m.x.; Zinci Oxid., one ounce; Adipis, seven ounces. At the end of twenty-four days, patient wrote that he was over half well, and next communication, five months later, stated he was entirely well—the ectropion remaining. Last report in letter inquiring as to operation to relieve the ectropion.

CASE II.—Blastomycosis. The patient was a negro man, aged 50 years, from South Carolina. First visit May 3, 1904. The disease began in left cheek five years before, healing in a year with a faint scar, after use of "some little salve." Appeared on the dorsum of left hand about the same time, got better along with cheek but did not entirely recover. Next, patch appeared on the left occiput almost healing in two or three months, but now on right edge and to the right a little papulo-pustulation and crusting—while the original site is occupied by a keloid about  $1\frac{1}{4} \times 1\frac{1}{4}$  inches. Disease began over right ramus of jaw about the time left cheek healed,

some points of healing now and then but rapid peripheral spreading. During the past winter the disease crossed the nose and occupied also the left suborbital region. Time of occurrence on right mastoid region not definitely stated.

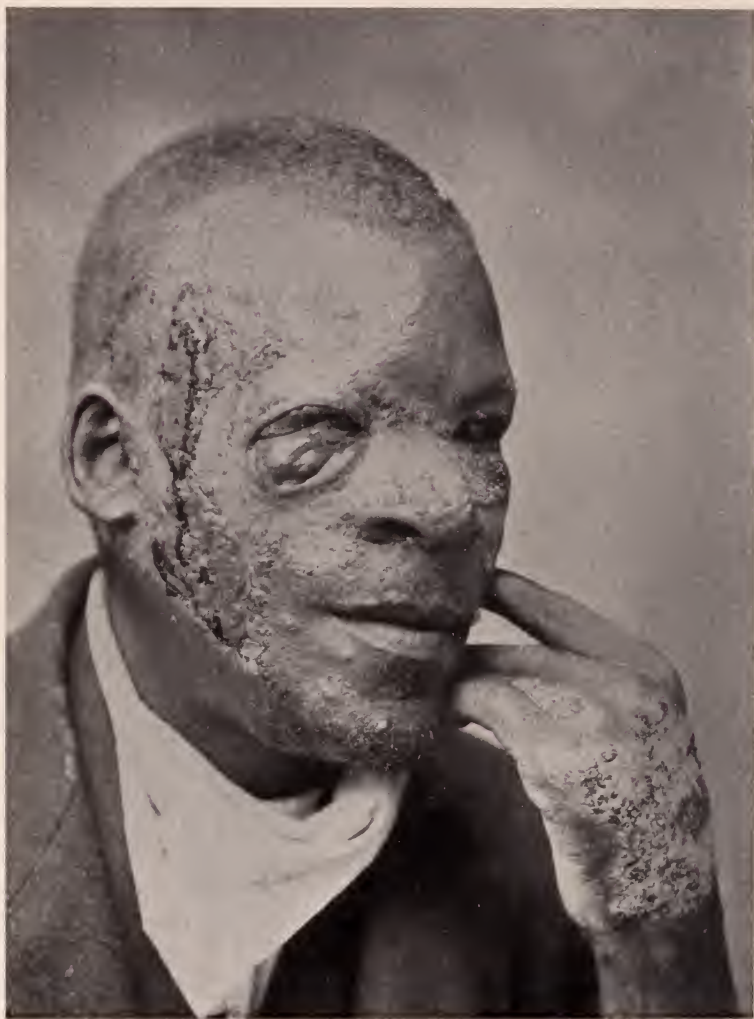
Upon examination; Disease covers the right mastoid region, and occiput adjacent, and one-fourth inch of auricle at posterior superior attachment, and above and below the tragus. Extends nearly to the mid-frontal line and a little above the temple, the lower edge along border and angle of inferior maxilla, most of right cheek, upper outer one-half right upper lip, across nose, occupying all but edges of nostrils and lower part of left ala and left suborbit, ending in a rounded patch opposite left outer canthus. Ectropion right lids, the lower exposing an inch of conjunctiva. Forehead, temple, post-auricular, nose, suborbital, and lip disease more or less papillomatous—pinhead to pea-sized, but mid-temporal and mid-nasal show some whitish scarring and healing. Disease is more uniformly papular in smaller areas and on the hand. From right temple to angle and border of right jaw a three inch wide, red, raw, flatly papillomatous, exuberant granulation area devoid of epidermis, elevated  $\frac{1}{8}$  inch. Has been wearing a vaselined cloth here.

Practically whole dorsum of left hand involved, as well as 3rd to 5th metacapo-phalangeal regions and first phalanx of ring finger, patches irregular in outline and papillomatous, crusts and some raw points. (Patient had been applying a mixture of kerosene oil and vaselin to hand.) Decomposition odor from diseased parts. Papules average small shot size, especially numerous in periphery—pus a marked feature under the crusts. (The late Dr. Robt. W. Hynds confirmed diagnosis with microscope.) The skin disease caused no gland involvement and but little impairment of health. The patient was instructed simply to keep the areas clean. No local medication was employed save a bland oil. Ten drops of a saturated solution of iodide of potassium were given three times a day after meals, rapidly pushing to 25 drops t.i.d. First evidence of healing was at posterior edge of right cheek. Raw area next on the hand. Iodic acne, especially of thighs, developed in few days but was disregarded as was the slight coryza. At the end of a week he was taking 30 drops t.i.d. There was steady yielding of the disease and in a little over two weeks the hand was almost recovered, leaving the skin smooth, pinkish, pigmentless. Unfortunately the first photograph was not obtained until this time. He was held at 30 drops for about





PLATE XLVI—To Illustrate Dr. M. B. Hutchins' Article on Blastomycosis  
Cutis.



24 days, then ordered 35 t.i.d. which number was never exceeded. Iodide lesions of brief duration, but new appeared frequently. The papular lesions melted away under the treatment. Some fleshy, appleseed sized papular elevations, tabs, formed in healed areas, and some minute scar abscesses. Hand well in seven weeks, with some of the queer level abscesses and papillomata. Nose, suborbit, temple and post-auricular free except a few pustules. These seemed secondary, were not over pinhead size, were level with skin, epidermic. The granulation area of right cheek healed steadily but slowly. He gradually became accustomed to the iodide until the acne gave little trouble. With a dressing of subnitrate of bismuth the right raw area healed more rapidly.

June 27th, 56 days from beginning of treatment, the active disease had disappeared. At the end of two months the patient went home free of disease. Recovered areas showed more or less of pigment and a few of the "flesh tabs," considerable scaling of the hand area. No actual scarring in any part. The raw surface on right cheek reduced to a patch, smooth, soft, shining,  $\frac{1}{2} \times \frac{3}{4}$  inch at upper end, then an isthmus of healing, and below a one inch patch. The potassium iodide was continued for some time at 20 drops t.i.d. The last photograph was sent me from his home three months later at which time Dr. C. M. Walker of Westminster, S. C., wrote me that the man was well, all but the ectropion. Eighteen months later Dr. Walker wrote that the patient had had some relapses, having taken his treatment very irregularly. This case was considered a cure, but the man being an ignorant colored laborer could not be controlled, and had some recurrence which a further use of the iodides would have prevented.

## SOCIETY TRANSACTIONS.

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### MANHATTAN DERMATOLOGICAL SOCIETY.

66th Regular Meeting, February 7, 1908.

Dr. A. BLEIMAN, Chairman.

#### Chancere of the Lower Lip. By Dr. E. L. Cocks.

Robert R., aged twenty-three years, American, single, and by occupation a brakeman. Patient states that he was in the habit of using the drinking glass in the passenger coach on which he worked. On December 25, 1907, he noticed what he considered a "cold sore." Did not pain him much, but kept on increasing in size. January 25, 1908, the "sore" had become quite large, somewhat painful and swellings appeared under the tongue, which were also painful.

Examination at that time. A typical primary sclerosis with local adenopathy was found. On February 2, 1908, a faint macular eruption appeared. The patient has had four injections of salicylate of mercury and the lesion and eruption are fading.

#### Pityriasis Rosea limited to pelvic region. By Dr. E. L. Cocks.

Mrs. B., aged twenty-one years, American. Present condition was first noticed by patient three weeks ago, and was diagnosed by her as "syphilis." Before the eruption appeared patient was troubled with nausea and flatulency. These have continued and are still present. With the appearance of the lesions pruritus set in. This causes the patient a great deal of annoyance and interferes with her sleep.

Examination. Some of the lesions are small, others large; they are irregular, with slightly raised borders and colored centers. The larger lesions on the lips have some scales, and are somewhat more circular in outline. The entire condition is beginning to show some tendency to advance upwards.

#### Lupus Erythematosus of the face showing beneficial results from Finsen therapy. By Dr. L. WEISS.

Miss Y. S., aged twenty years, Russian. At the age of thirteen, a small nodule appeared on the right cheek; soon the surrounding skin became erythematous and very scaly, extending to the left involving the nose and left cheek, to the right involving the entire cheek and the right ear. The left ear and the upper lips soon became involved. The affected



areas were always red and scaly. Was treated for one year in St. Petersburg, and then went to Warsaw, where, for one year was treated with salves, plasters and the Paquelin cautery. The results not being very satisfactory, she returned to St. Petersburg. No treatment for one year. Later patient went to Vienna where after a preliminary course of treatment with salves and plasters, she was exposed to the Finsen light. This lasted for two years, consisting of daily exposures of from two to four hours and occasionally twice daily.

At present three active lesions are seen. One on the left cheek, about the size of a silver dollar, still very red and scaly. A much smaller one on right side of the nose and a third one just behind the right ear. Other parts of the face show typical parchment like scarring. The ultimate result obtained with Finsen light in this case, is much better than we are accustomed to see by the use of pastes, plaster caustics or radio-therapy. The scar tissue here present may be due to the use of carbolic acid and cautery; it is a very difficult matter to decide as the patient is not very clear about the matter.

**Keratoma Hereditarium Plantare et Palmare. (Two cases.) Dr. W. S. GOTTHEIL.**

Josephine C., aged twelve years, of Italian parentage. Healthy child; abnormality first noticed when about one year old. Palms and soles are the seat of a uniform, diffuse thickening of the epidermis, so that both regions are of a dark yellow or lemon color in daylight, instead of the normal pinkish. In the midst of these thickenings, careful pressure reveals the presence of a number of deep seated apparently hyperkeratotic nodules. There are a number of scratches and one or two rhagades on the palms. The mother states that the child very frequently injures her palms accidentally. On the palmar surface of the fingers there is a permanent tendency to desquamation. The nails are all incurved and thickened. On the backs of the hands, over the knuckles and limited to this area, are groups of what are apparently soft warts. There is no other abnormality of the skin or other organs.

Milly C., sister of Josephine, presents precisely similar lesions, the thickenings of the epidermis of the palms and soles, the thickening and incurvation of the nails, and the groups of warts over the knuckles; but these abnormalities are less marked than in her sister's case. Here also the deformities were noticed very early in life. Neither the mother nor the aunt, the only relatives seen by the presenter, present any similar deformities. These cases are undoubtedly congenital, and increase with age, as is shown by the difference in the severity of the two cases; at birth it was probably so slight as to be unnoticed.

**Bromoderma Verrucosum. Dr. W. S. GOTTHEIL.**

Isaac S., aged twenty-six years, Russian. Has been an epileptic since childhood. Has been taking bromides for the last two years, and has suffered from his present eruption for the last five months. Commencing as a small spot on the leg, it has steadily increased in size, and new lesions have appeared in its vicinity. No subjective sensations. The patient was admitted to Lebaron Hospital, February 10, and stayed there three weeks. During that time there were absolutely no epileptic manifestations. No bromides were given, no new lesions developed, though there was a slow increase in size of those already present. The patient finally left the hospital because he was dissatisfied at not getting bromides. For the purpose of watching the spontaneous development of the lesions the local treatment was confined to the use of boric acid ointment.

All the lesions were on the inner aspect of the right leg, middle third. The first that had appeared was the largest, and was almost an perfectly round plaque two inches in diameter. The margins were purplish red, moderately indurated and raised; the tumor itself markedly verrucous; its entire surface being covered with papillary excrescences. At the margins, where the papillæ were higher and drier, they were brownish and glistening; in the slightly depressed center of the mass, however, they are less marked and regular, and distinctly pinkish in color. Just above and slightly anterior to this largest lesion is another precisely similar one, one inch in length and one-half inch in breadth. Anterior to this, over the shin, are two elongated lesions less markedly verrucous and evidently younger than the first ones. Posteriorly, over and above the Tendo Achilles, are several papulo-tubercular lesions, hardly verrucous at all. The rest of the body is clear and there is no reason for the unilateral appearance of the lesions in this case.

M. B. PAROUNAGIAN, M. D.,  
Secretary.

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**MANHATTAN DERMATOLOGICAL SOCIETY.**

67th Meeting, March 6, 1908.

Dr. BLEIMAN, Presiding.

**Epithelioma of Lip and Rodent Ulcer of Cheek. Dr. E. L. COCKS.**

R. W., aged sixty-seven years, school-teacher, American, non-alcoholic, does not smoke. No history of syphilis. Two years a small painless pimple appeared on the lower lip to the right of the median line, and gradually spread. At the present time the swelling involves the entire lower lip. In the center of the mass is an exulcerated area, with in-

durated margins and an angry looking base. Is not tender. The sublingual glands are not enlarged.

On the right cheek just over the site of the salivary glands is a dime-sized, ulcerated area. The granulations are exuberant, bleed upon the slightest irritation, the edges are eroded. This growth appeared several months before the one on the lip.

#### **Lepra Tuberosa. Dr. A. C. GEYSER.**

Mr. X., aged twenty-two years, native of the British West Indies. Four years ago patient noticed nodules of various sizes appear on the skin. The size was from that of a small pea to a fair size walnut. These appeared scattered all over the body. Some spread, others remained stationary. Two years ago he came to this country and consulted a physician who treated him for syphilis. There was no improvement, to the contrary the lesions became more numerous. About one year ago a sore appeared on the sheath of the penis and was at that time diagnosed as a chancre. No other manifestations appeared. The many varied sized nodules are now present on the thighs, arms, back and face and forehead. Has anæsthetic areas on the anterior surfaces of the thighs. The ulnar nerve shows decided thickening. Dr. Geyser in presenting the case called attention to the fact the leprosy was present a number of years before the so-called syphilitic infection took place and doubts the diagnosis of syphilis.

#### **Lichen Planus et Verruca Planum, co-existing in the same case. Dr. M. B. PAROUNAGIAN.**

Mrs. E. W., aged fifty-seven years, family and previous personal history is negative. The warts have been present for the last twenty years. Three years ago the present condition began in the form of an itchy eruption. During that time the subjective symptoms had subsided, but at present the itching is so intense that she comes to the dispensary for relief.

In the cubital fossæ, on the extensor surfaces of both forearms, on dorsum of the hands, are scattered many papules, small, angular to polygonal, violaceous to purplish in color, with flat and shiny tops. On the inner aspect of the left thigh and at the instep of the left foot are a number of similar lesions. All the lesions are very itchy. Scattered in amongst these are a number of flat, round, non-inflammatory papules, which as before mentioned have been present for many years.

Dr. GEYSER suggested the use of the X-ray in this case, especially upon the lesion on the lip. He considers surgical intervention contra-indicated on account of the great mass of tissue that would have to be removed. The cosmetic results would be far superior to that obtained surgically and the prognosis as far as life is concerned would be about the same.

**Erythema Induratum Scrophulosorum. (Erytheme indure Bazin.)**

Dr. EDW. PISKO.

Kate L., aged eighteen years, American, by occupation a clerk. Family and previous personal history negative. Last spring patient had some deep seated pains in the legs, soon followed by deep seated lumps, which in a short time appeared on the surface and left scars. Eruption lasted four months. This spring (about four weeks ago) had a number of painful spots which in a few days were the site of deep-seated lumps. These lumps appeared on the surface in about ten days and have been present since.

On the extensor surface about the middle third of both legs are numerous scars and recent lesions. The scars (so the patient states) are present from the attack of last spring. The recent ones are pea-sized, some elevated, others deep seated, nodules, varying in color from bright red to brown, the redness shading off into the surrounding normal tissues. None of the lesions shows any active ulceration.

**Circinate Syphilide in a colored woman. Dr. E. L. Cocks.**

Mrs. P., aged thirty-three years, married twice. One child by her first husband. Never had any miscarriages. Married to second husband for last seven years. Has not been pregnant since. On January 20, 1908, noticed a sore on the right labium majus. Came to Harlem Dispensary on January 30, 1908, complaining of severe headache and pains in her bones. A general adenopathy was present. The entire cutaneous surface is covered with a small sized circinate syphilide. The papules forming the rings are raised about 2 mm. On account of the color of the patient the interpapillary erythema cannot be seen. The papules themselves are slightly pinkish in color, the center being very much darker than the surrounding normal area, making a very striking picture. Under the injections the lesions are rapidly retrogressing.

M. B. PAROUNAGIAN, M. D.,

Secretary.

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**ERRATUM.**

*October Number.*—Page 453, sixteenth line read “speculum” instead of “spectrum.”



# THE JOURNAL OF CUTANEOUS DISEASES

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## KERATOSIS FOLLICULARIS RESULTING IN MULTIPLE EPITHELIOMA: REPORT OF A CASE.\*

By GROVER WILLIAM WENDE, M. D., Buffalo.

**S**UMMARY of Chief Points.—Began at 17, affecting the palms and soles; at 22 appeared upon the corporeal surface, the lesions closely resembling those of keratosis follicularis; at 27, the oldest lesions losing all similarity to that affection and gradually developing from the suspicion to the certainty of the three clinical varieties of epithelioma—superficial, deep-seated, and papillary. Microscopical examination of the primary type showed thickening of the stratum corneum, with horny, pocket-shaped elongations, originating in the inter-follicular and follicular tissue; peculiar cell-structures in the epidermis, the result of an anomalous type of cornification, agreeing with the so-called Darier pseudo-psorosperm bodies; in the larger lesions a gradual malignant transformation with a final giving way of the basal membranes, the lowest epithelial cells proceeding downward, infiltrating the derma and developing into the various types of squamous-celled epithelioma. The Darier's bodies found in the primary lesions were also discovered in the various conditions of epithelioma.

*Description of Case.*—J. T. R., age 37 years, of medium height and spare build, came under observation December 23, 1907. Had been working for seventeen years as a clerk in a railroad office, and for five months in a foundry.

*Family History.*—No history of a similar condition in any member of his family; an aunt died from carcinoma of the breast; mother died at the age of seventy-five from "painful stomach

\* The case was presented before the American Association for Cancer Research, April 15, 1908, and before the Alumni Association, Medical Department, University of Buffalo, May 28, 1908. The present paper was read before the American Dermatological Association, at Annapolis, Maryland, September 25, 1908.

trouble"; father, at the age of fifty-nine, probably from cirrhosis of the liver. Three living brothers and one sister, well. Two sisters died of consumption.

*Past Personal History.*—The patient had been subject to the common infections of childhood, including scarlet fever and whooping cough, and, later, typhoid fever. For the past few years had a bowel trouble, from which he was obliged to go to stool immediately following meals. No history of syphilis beyond the fact that immediately prior to consulting me he had received two years' treatment for that disease. For a number of years previous to the time when the skin lesions presented themselves on the hands and feet, and, indeed, long after their appearance, the patient had taken no medicine; but afterward he admits having indulged in a few patent medicines, none of which, as far as I know, contained arsenic.

*History of Skin Disease.*—When seventeen years old he noticed the beginning of callous formations upon the palms and soles, which developed in an insidious way. Sometimes the hands were almost free, at other times well covered. These formations caused pain upon either manipulation or removal. At this time the hands and feet began to perspire freely upon the slightest provocation. At the age of twenty-two, a similar lesion appeared upon the left side, just above the nipple, which grew very slowly for ten years, and finally attained the size of a split-pea, described as hard and like a fish-scale. About five years ago this lesion showed a more rapid development, with a redness at the base never before present. At a later period he discovered that a mass would fall off about twice a year, leaving a red base. Six years after the appearance of the lesion on the chest, when the patient was twenty-eight, he discovered a similar one on the nape of the neck, and, shortly after, still another one upon the back, over the right scapula. Two symmetrical lesions, recognized at first through the chafing of the indurated points, also appeared above the anus, one upon each buttock; these in time became soft and bled freely after stool, or upon manipulation, leaving a small ulcerated area, accompanied with a discharge. The ulceration slowly augmented, and was finally accompanied by severe burning and intense pain, the latter condition continuing during the last year.

During the last two or three years innumerable pinhead excrescences were noticed upon the trunk, especially the upper portion of the chest, all corresponding, in the beginning, to the lesions just

described, some gradually developing into papular and spiny elevations. Since that time there has been a gradual extension of the lesions, with progressive changes in the character of many of the oldest, showing redness at the base and a hard crown. These sometimes would disappear spontaneously, and at others be removed by accident, or by intention, in order to relieve the pain caused by the attrition of the clothing. The horny mass would finally disappear and the remaining portion continue to develop.

*Present Condition.*—No evidence of internal disease. Hair prematurely gray; a heavy hirsute growth upon the body; complexion pale, suggesting anæmia. Mental condition not defective; patient inclined to be taciturn. Urine and blood normal.

On the palmer and planter surfaces: Scattered irregularly over these were isolated lesions, varying in size from a pinhead to a lentil. The center was occupied by a mass of horny cells which protruded from the papule, resulting in filliform spines of various sizes, the largest measuring about one-third of an inch. Some had been removed, leaving a depression.

On the arms: These were chiefly free, the dorsum of the hands, the forearms and the arms, with the exception of that portion near the shoulder, where were eight lesions of split-pea size.

On the legs: The dorsi of the feet were normal, save for a lesion with a well-defined border, flat, grayish-red, slightly infiltrated, the size of a ten-cent piece, upon the right foot. The lower part of the legs and the inner side of the thighs and perineum were free. On the outer and upper side of the thighs were scattered a number of lesions in various stages of development.

On the trunk: The anterior and posterior surfaces of the trunk were occupied by, approximately, five hundred incipient lesions, varying in size from a pin-point to a lentil. From the beginning these did not materially vary in color from that of the normal skin. Smaller ones, only discernible by the aid of a magnifying-glass, appeared like cornified, adherent cells lying upon the surface and seeming to be deficient in natural unguent, most numerous and least distinct upon the upper part of the chest and back, and, in every instance, isolated.

SPECIMEN No. 1.—Microscopical examination of lesions which represented the inception of the disease based upon the smallest-sized lesions removed from the upper part of the chest. Under low power the most striking change shown in the skin was a hyperkeratosis in all the layers. Under the thickened corneous layer the

rete proper was hyperplastic, the inter-papillary processes had become widened and, in many instances, the characteristic cuboidal and cylindrical cells assumed a shape approximately oval, with loss of fibrils, presenting the appearance of œdema. Few karyokinetic figures were present. This process seemed to have developed independently of any orifices of the skin. In the derma slight inflammatory changes were noted about the vessels lying beneath the inter-papillary rete pegs.

*Gross Appearance.*—Upon examining with the naked eye the next-sized lesions, they were found to be dry and slightly scaly, firm, flattened or pointed papules of from pin-point to pinhead size, rough, slightly elevated above the skin and hard upon pressure. They appeared as though a fragment of isinglass had been dropped upon the skin, and, if removed, would leave a slight rough and scaly depression, but no hyperæmic base—the skin appearing normal. A few resembled black-topped comedones projecting above the level of the skin—undoubtedly an accidental complication.

*SPECIMEN No. 2.*—Microscopical examination in the grape-seed-sized lesion removed from the chest: under low power the same process was seen going on in the epidermis as in previous specimen, and the lesion was found to begin abruptly. There was no marked thickening or prolongation of the adjacent inter-papillary rete pegs, but a decided hypertrophy and lengthening of the same beneath the hyperkeratosis, with a well-defined basal membrane extending three times its normal length into the corium. The various layers of the epidermis were hypertrophied, the process being confined, for the most part, to the neck of the sebaceous follicle in the form of a pouch, due to the infolding of the surface. The contents were made up of epithelial cells more or less in the form of lamellæ; in places the cell-structure had become almost obliterated. At the bottom of the pouch the cells were uniform in size, irregularly arranged, and, at the margins, showed frequent karyokinetic figures.

In the deeper and middle layers of the skin, and especially in close relation to a horny plug, existed round-oval cells, which appeared either singly or in groups of two or three, about twice the size of prickle-cells, having a well-stained nucleus, surrounded by a clear ring of protoplasm, outside of which was a dark-colored ectoplasm. There were no lymphocytes to be seen. In the deeper portions, and at the margins, the cells contained small chromatin inclusions in the protoplasm. The stratum granulosum was increased in width and was represented by six to nine rows of cells. The cells



were densely packed with keratohyalin granules. The stratum lucidum was well defined.

*Corium*.—Under the horny plug, where it had exerted the greatest pressure, the papillary and sub-papillary vessels were dilated, and a dense infiltration of inflammatory cells extended up to the basal membrane. These cells mostly resembled lymphocytes, though many polynuclear leucocytes were seen, as well as some mast cells, connective-tissue cells and many plasma cells. The dermal portion of the sebaceous duct and gland was not affected and could readily be traced up to the horny mass. The follicles of the hair-shaft, obliquely cut, showed no change. Fibers of the corium, apart from the œdematous effect, seemed to be healthy; no degenerative process could be detected. The elastic tissue was well preserved. The glands were unaltered.

*Gross Appearance*.—The still larger and more prominent lesions were papules the size of a split pea, at times acuminate or flattened, dry, scaly and grayish. Some of them showed a redness at the base and grated as the finger was pressed over them. The horny excrescence removed from a lesion the size of a split pea was treated with ether without change, showing that no sebaceous matter was present. A depressed pit was left, surrounded by a minute circular wall of infiltration. Bleeding points could easily be produced.

*SPECIMEN No. 3*.—Microscopical examination of a pea-sized lesion removed from the abdomen. Under a low power the section near the center of the lesion showed broad, narrow or confluent inter-papillary formations, while, above, the surface was irregular, due to the varying indentations of the horny layer. There were no pouch-like formations of the epidermis. The surface was covered with a dense epidermal layer of a thickness equal to twice the length of the inter-papillary rete pegs. The arrangement of the epithelium was comparatively regular. Karyokinetic figures were less frequent than in lesion number two. The basement membrane was intact throughout. There were more cell-inclusions than in lesion number two, some of the zonal type being present. There was no excessive production of keratohyalin in the deeper layers. Throughout the rete, especially in the lower portion, many lymphocytes were present, indicating a dilatation of the inter-epithelial lymphatic spaces, the result of œdema.

*Corium*.—The infiltration in the upper layer of the corium was not nearly as marked as in lesion number two. The blood-vessels of the papillary and subpapillary layers were dilated. Around the

smaller vessels of the papillary layer was more or less cell-infiltration consisting of leucocytes, connective-tissue and a few plasma cells. The fibrous elements were without change. The lower portion of the pilo-sebaceous area was unaffected. An interesting fact was noted in connection with this lesion: the lumen of the sweat-coils was uniformly widened and the walls of the sweat-ducts were thickened several times their usual size. Surrounding the sweat-ducts was a cellular infiltration, similar to that around the blood vessels.

*Gross Appearance.*—Another variety of lesions shows well in the photograph and represents some of the older ones—large, projecting, horny concretions of varying size, the base of which was thickly coated with a white, opaque cuticle, showing several layers of cells. The center contained a very firm, horny mass, although the base showed evidence of redness through the epithelium, and presented a waxy appearance. In five instances this bulky mass of epithelium was easily removed. Its color was a peculiar yellow-gray, and the removed portion was translucent, presenting the shape and consistency of a horn. The base was rough and encrusted with dirt. The horny mass was so brittle that it could be crushed between the fingers. The shape of the horns was essentially similar. The thickness and height were the same, with a single exception, and were about half an inch in length. The horns were very sensitive to the touch, and their manipulation caused great pain. After the removal of the larger ones the base showed features that justified suspicions of epithelioma.

*SPECIMEN No. 4.*—Microscopical examination of small filbert-sized lesion removed from the lower part of the abdomen. Under a low power the most striking change was a hyperkeratosis, covering the skin in the form of a cutaneous horn measuring ten millimeters in breadth and five in height. Extending into the open duct of a sebaceous gland, which was considerably dilated, and filled with a horny mass made up of epithelial cells arranged more or less regularly in vertical columns, another portion of the section showed an intra-follicular pouch filled with horny cells, presenting a similar appearance to the duct of the sebaceous gland. There were scattered throughout the horny cells in concentric arrangement, “pearl” formations. The section made from the edge of the lesion under the low power showed the epithelial down-growth. At the outer edge, the inter-papillary processes of the skin were slightly thickened, but did not penetrate the corium. Toward the center of the section proliferation and extension of the rete cells merged into ramifications

and a complex arrangement of epithelial cells, with nests invading the corium and justifying a suspicion of epithelioma. Epithelial "pearls" were more frequent near the surface than in the deeper structures where the cell-nests penetrated. In the deeper portion of the corium they were hardly discernible. In the central portion, examined under a high power, the hypertrophied rete showed evidence of rapid growth, as many mitoses were observed.

*Corium.*—In the derma, dense inflammatory infiltration between the epithelial nests was noted, more marked toward the center by exudation of lymphoid and polynuclear leucocytes and connective-tissue cells, with a few mast and many plasma cells. The infiltration at the margin was free from plasma cells. Nests of epithelial cells were also observed within the lymph spaces. Examination of the cells of the section with oil immersion showed frequent hyaline inclusions in the protoplasm of the epithelium, which stained blue with polychro-methylene blue. These were found at the base of the horny plugs and among the proliferating epithelial cells in the derma, varied in size from one-half to three or four microns in diameter, and were usually spherical, but frequently presented distorted forms.

*Gross Appearance.*—Still another type of lesion which showed a marked progressive change, but, without doubt, a sequence of the others, was irregularly scattered over the anterior and posterior surfaces of the trunk. No symmetrical tendency was seen in its distribution. There were thirty lesions located in the inguinal region and five over the pubic. More were found in these localities than in other portions of the body. There were also twenty on the upper part of the back and over the spine. The remainder were scattered over the trunk, the only exception being one on the dorsum of the right foot. The smaller lesions were covered with roughened keratosis, especially in the center; the border was comparatively free from scales. In the larger there were proportionally less scales. The lesion, after losing the bulky, scaly mass, gradually enlarged peripherally, and the border was round, oval or irregular, and disc-like, showing a dull-grayish, yellowish, reddish infiltration. The larger ones had a roll-like border with dilated venules, presenting the appearance of a clinical variety of superficial discoid epithelioma—some positive, others merely suspicious, and varying in size from a lentil to a half dollar.

*SPECIMEN No. 5.*—Microscopical examination, large flat papule, the size of a five-cent silver piece, removed from the abdomen. Under low power, in sections cut from the edge of the lesion,

the elevation was found to consist of about equally thickened laminated layers of epithelium. At the margin of the lesion the normal epithelium extended upward for a short distance upon a mass of epithelial cells. The specimen showed two instances where the mouths of the pilo-sebaceous ducts were dilated into funnel-shaped openings and packed with masses of horny cells, which stained more deeply with hæmatoxylin and less intensely with eosin than did the normal epithelium. The stratum granulosum of the normal epidermis extended downward, and, for a short distance, could be traced between the mass of epithelial cells, afterward failing to be discernible. The malpighian layer had proliferated extensively, and the inter-papillary process became rounded and blunt, the deeper portion being very marked. Under the central portion of the lesion there was a well-marked cell-infiltration.

With the high power in the basal layer, which was irregular, there was no evidence of breaking through or penetrating into the corium by individual cell-groups. The arrangement of the cells of the malpighian layer beneath the lesion was comparatively regular, a sharp line of demarcation entering beneath the margin of the inter-papillary process and the corium. The lesion was mostly made up of large, irregularly shaped cells. In place of the stratum lucidum, which was obliterated, and toward the surface, evidence of cornification of the cells became more marked, but deposits of keratohyalin were not apparent until the superficial layer was reached, and close to the lesion, with vesicular nuclei and pale-staining protoplasm. Karyokinetic figures were occasionally present. In the deeper portion of the lesion lymphocytes were met, many of them in forms suggestive of migration, and in certain regions many lymphocytes had apparently broken down. Spherical and irregular inclusions of chromatin could be found in the epithelial cells, many of them, no doubt, due to disintegrating lymphocytes. The substance of the lesion was apparently composed of cells derived from the stratum granulosum—the whole essentially a hyperkeratosis of the epidermis, showing irregularities of the surface in the form of pouches, although favoring the sebaceous follicles. The epithelium near the horny plugs seemed to be altered: acantholysis had taken place. Among the cells were frequently found peculiar bodies, varying in size from two to three times that of the prickle-cell. Some appeared to have a sharply defined capsule and a clear space, an irregular mass of chromatin forming the center. They were frequently twice as large as, or even larger than, the epithelial cells, which surrounded



them, and were usually spherical and embedded in the protoplasm of the cells. Both in the stratum granulosum and in the body of the lesion were small hyalin chromatic inclusions. These were frequently surrounded by a pale area in the protoplasm, and were similar to the inclusions belonging to molluscum contagiosum. One could trace transitions from the smallest inclusion to the large vesicular types first mentioned.

Serial sections made through the center of the lesions showed, under the low power, that the margins presented the same characteristics as those taken from the edge of the lesion, with the exception of a loss of hornified cells. The inter-papillary processes at the center of the lesion were confluent, the whole forming a blunt, huddled mass, with frequent karyokinetic figures near the edge of the horny plug. Beneath the center of the lesion the basal membrane was definitely broken through and there were prolongations of the epithelium into the corium. On cross sections of the definite, elongated inter-papillary process were irregularly arranged nests of epithelium in the subcutaneous tissue. There was a moderate amount of round cell-infiltration, consisting of leucocytes, lymphocytes, numerous plasma cells, connective-tissue cells, and occasionally a mast cell at the borders and surrounding these nests of epithelium. In the more advanced proliferating portions of the lesion there was no evidence of prickle formation of the cells. This lesion agrees with the picture of incipient epithelioma.

*Gross Appearance.*—There were three instances of epithelioma of the papillary type, one on the scrotum, the size of a filbert, having a constricted attachment which was smooth and reddish; one on the abdomen, the size of a grape, and one on the back, a trifle smaller.

*SPECIMEN NO. 6.*—Microscopical examination—section from filbert-sized tumors removed from scrotum. The section was made through the central portions perpendicular to the surface. It measured from the surface downward twelve millimeters. Under low power the lesion showed a continuous mass of epithelium from the down-growth of the inter-papillary processes. Here and there were deposits of interlacing fusiform epidermic cells, forming secondary bud processes, the center composed of isolated epithelial masses, often in "globes" in the corium and deeper tissues. The entire substance of the section was composed of large papillary protrusions which, in cross sections, presented the characteristic appearance of extensive horny metamorphosis, the cells being arranged in concen-

tric layers, with "pearl" formations, even in the deepest parts. Epithelial "pearls" of considerable size were found surrounded by many layers of characteristic cutaneous epithelium. The "pearl"-like accumulations of hornified material were thickly infiltrated with lymphocytes, leucocytes and cells that presented the characteristic prickle-cell formation, frequently limited by a definite membrane. The malpighian layer, in most parts, was thickened, but in places branching processes of cells were given off and ramified in the tissue beneath, uniting one with another. The inter-papillary processes were mostly hypertrophied and, here and there, slightly infiltrated with inflammatory cells. The vessels were numerous and dilated throughout the entire section and frequently blocked up with endothelial cells; in some of the sections collections of epithelial cells were massed about the blood vessels. There were noticed a number of darkly stained more or less rounded bodies, some of which were several times larger than the prickle-cells, the whole presenting a picture of squamous-celled epithelioma of the papillary variety.

*Gross Appearance.*—The two largest lesions were situated just above the rectum—one of them close thereto, and showed clear evidence of an underlying granulomatous infiltration. The smaller of these consisted of a raised, nodular growth with an elevated, punched-out, undermined margin and ulcerated center, covered with débris and firmly attached. The other ulcer had a diameter of about two inches, and was deeply seated in the subcutaneous tissue, having an indurated edge extending about a half inch beyond and occupying the site of the original lesion.

*SPECIMEN No. 7.*—Microscopical examination—section representing twenty millimeters of skin surface, about one-half covered with epidermis, the other an open ulcer taken from the larger one. Under low power the inter-papillary processes of the skin at the margin of the ulcer showed prolongations downward, and at the edge the epidermis was folded over and extended to its base. In this region there was a definite, active proliferation of epithelium into the subcutaneous tissue. The base of the ulcer was composed of granulation-tissue and nests of epithelium which extended through the stratum corium into the subcutaneous fat tissue. Under higher power one could trace in the active proliferation of the inter-papillary processes at the margin of the ulcer long projections from the processes into the subcutaneous tissue, some with more or less perfectly formed "cell pearls." Any suggestion of regular formation was, however, promptly dismissed, and nests and prolongations of epithelium pene-

trated into the subcutaneous tissue. The cells showed the greatest variety of form and frequent karyokinetic figures. Nests of epithelium extended into the subcutaneous fat, and toward the central portion of the ulcer extensive solid masses of rapidly proliferating epithelium were frequent. There was a certain amount of leucocytic infiltration and active granulation-tissue formation on the surface of the ulcer. In the deeper portions of the lesion, when examined with oil immersion, the epithelial cells were seen to contain frequent inclusions, all types from the small chromatin inclusions described in the earlier lesions to large, encapsulated, complex bodies filling the body of the cell-space in the middle of the cell and pushing the nucleus to one side. Many of these had a thick capsule and small masses of protoplasm containing a definite nucleus, with a central body surrounded by a clear space. Toward the surface of the ulceration these inclusions were not so frequent, the epithelial nests were often broken up, and the individual cells isolated by granulation tissue. Just beneath the surface of the ulcer there was a dense leucocytic infiltration and the epithelial cells presented evidence of atrophy. The lesion presented the characteristic picture of a rodent ulcer.

Tissues were fixed in Zenker's fluid, alcohol and formalin; were embedded and cut in paraffin and stained by various methods—Delafield's eosin, borax, polychrome methylene blue and neutral orcein, polychrome methylene blue and safranin, Borrell, Van Gieson method, Weigert's and Gram's.

*Further Course and Treatment.*—Numerous exposures of X-ray were given to the anterior and posterior surface of the body, and especially to the ulcers located near the rectum. The superficial one soon disappeared, the larger one was only slightly influenced. The smaller epitheliomas were removed from various portions of the body under cocaine infiltration.

On April 21, 1908, the patient having been put under an anæsthetic, the growth was removed by Dr. Marshall Clinton. There was an indurated area of infiltration, having a diameter of two inches, the center of which was occupied by an ulcer measuring half an inch. The area included a small portion of the anus. When the growth was removed the adipose tissue presented a healthy appearance. A copious hæmorrhage followed, and the wound was left to granulate, as it was impossible to close the same by suturing. The filbert-sized epithelioma from the scrotum was removed, together with fifteen of the superficial discoid variety from the inguinal region.

June 7, 1908, a recurrent growth, lying close to the anus, was removed under an anæsthetic, having been first noticed about ten days before. This included about half an inch of the rectum.

July 1.—A small, hard mass was discovered at the outer edge of the rectum. This was immediately put under X-ray exposures, carried to the point of producing an erythema, and in two weeks the mass had entirely disappeared. Since that time the area has been regularly X-rayed twice a week. In innumerable instances the smaller superficial epitheliomas, accompanied with a slight amount of keratosis, began to improve after two applications, and completely disappeared after five to six. X-ray exposures of moderate intensity over the anterior and posterior surfaces of the trunk, given at irregular intervals, had a decided influence on the larger lesions which did not involve an excess of keratosis. The smaller conical elevations disappeared entirely.

*Synopsis of Clinical Appearance.*—The disease began twenty years ago, when the patient was seventeen years of age, upon the palms and soles, in the form of horny spines, varying in size from that of the head of a pin to half an inch, projecting from a papule composed of normal tissue. The condition was mutable; at times these localities were virtually unaffected, at others the hands and feet were almost entirely covered. An interesting feature consisted in the fact that the oldest keratosis was located on the palms and soles, and that at no time was there any tendency toward an epitheliomatous change. It is well known that these specific localities are especially prone to develop any of the various forms of keratosis, and it is possible that their unusual powers of resistance, due to their anatomical structure, prevented the lesions from undergoing malignant transformation.

The initial lesions on the body began about fifteen years prior to this report, and five years after the invasion of the palms and soles. They made their appearance above the left nipple, and had an insidious and inconspicuous development. The beginning of the lesion on the back and of the one on the buttock dates from two years later, and it was only after eighteen years of unvarying existence that the condition was said to have taken on positiveness and acceleration and that many new lesions were developed. The above statements lead to this interpretation of the patient's history, derived from his rather indefinite representations. The early lesions began in two ways: First, in an aggregation of horny cells upon the epidermis, which were dry, could readily be removed without



altering the appearance of the skin, and apparently did not originate at a gland orifice. At other places, minute, colorless papules appeared, so slight as to suggest "goose flesh," apparently occupying follicular openings. As to the mode of development, in certain areas the skin appeared as though a great many lesions were beginning to form, the majority of which seemed to remain stationary. The lesions that increased in size consisted of papular elevations of a conical form, some pierced with hair and irregularly distributed over the trunk. Still larger papules, although not as numerous, were pea-sized, rounded and flattened, and showing a grayish surface; others were covered with horn-like projections. It was easy to trace, by means of the progressive development, the intimate connection between the earliest and the largest lesions. At no time had they become confluent. There was a marked variation in the rate of progression. The entire corporeal surface, especially the chest, was thickly strewn with inceptive lesions, but only a limited number appeared to go on developing, the majority remaining stationary at their earliest recognized stage. Even in the ones that had progressed there was a marked difference in development; some would grow slowly for a time and then remain stationary, while others would develop rapidly through their entire course. The lesions thus described had more features in common with keratosis follicularis than with any other skin disease; the characteristics of that malady are so pronounced that to confuse them with other dermatoses is scarcely possible.

Since this curious form of hyperkeratosis was first described by James C. White, (*Journal of Cutaneous and Genito-Urinary Diseases*, 1889, p. 201, and Darier, *Ann. de Derm. et de Syph.*, 1889, p. 597) it has been the subject of a great many investigations with final uniformity of agreement regarding its unique pathological anatomy, and the affection has been recognized as existing to a limited extent in all countries. The lesions in the present case that were benign in appearance closely correspond to keratosis follicularis as regards form and development, but this case presents a feature all its own, namely, the deliberate transformation of the oldest and largest benign lesions into epitheliomas. A careful examination of the literature has failed to disclose any similar transformation. One could trace in these manifestations a progressive change, clinically, in the largest lesions which might justify the suspicion of epithelioma. Upon further examination sufficient evidence appeared in others to prove that if any one of the latter were alone under ob-

servation no other diagnosis than ordinary epithelioma could be entertained. Some of the lesions that were covered with elongated horny masses seemed to proliferate epithelium more rapidly than is common in cases of keratosis follicularis, and to be transformed into what might be classed as a cutaneous horn undergoing epitheliomatous change. The horns were conical, straight, convoluted or angular and were readily removed, leaving a reddened base which showed a peripheral activity. There was another variety where the horny proliferation was materially lessened and the lesions showed a development at the borders, changing from hemispherical to flat and asserting the clinical appearance of the superficial discoid variety of epithelioma. It is difficult to determine when the transformation from a benign to a malignant condition took place, as the decision depended upon the patient's answers to questions concerning the time when the largest and oldest lesions—those upon the chest and the one located upon the buttock—began to show change. This would make the duration of the epithelioma about ten years. There were one hundred and seven epitheliomas, all save two being located upon the trunk. One of these was upon the dorsum of the right foot and the other on the scrotum. Of the one hundred and seven instances, twenty-five were proven microscopically. All three clinical varieties were represented—the superficial, deep and papillary. More than one hundred were of the superficial discoid variety. In three instances the typical form of the papillary variety of epithelioma was observed. The largest one removed from the scrotum was of one year's duration. In a single instance the superficial variety ended in the ulcerative form, which was a menace to the patient. The epitheliomas were deliberate in development, and showed no marked degree of malignancy.

*Summary of the Histological Changes:* My own observation from the histological examination of the case detailed above may be summarized as follows: In the smallest lesion—which consisted of an irregularity of the epidermis, ending abruptly and composed of flattened epithelial cells which appeared as though they took their origin in an inter-follicular space—a feature of unusual interest was the influence of the hyperkeratosis above, causing a rapid proliferation of the inter-papillary processes which limited itself to the area beneath the cornified cells. The deeper prickle-cells, to a certain degree, presented the appearance of œdema with loss of fibrils. The early process may be considered a simple hyperkeratosis without acantholysis or dermo-papillary reaction. The lesions corresponding to the largest size of keratosis follicularis were invariably alike.

There was a hyperkeratosis inducing numerous irregularities of the surface made up of concentric lamellæ composed of flattened horny cells, beginning anywhere, but favoring the upper third of the sebaceous follicle, causing a distension by the horny cells of the orifices of the ducts, as well as a process of irregular cornification. The same result was observed apart from the ducts of the glands which resulted in the formation of pockets for the concretions of the horny cells. In places, the cells of these plugs were compressed into globular masses, forming epithelial "nests." The rete usually thickened early, and, in the later stages, the inter-papillary processes were greatly elongated, often coalescing. In advanced lesions, the horny masses resulted in thinning and atrophy of the epidermal structures. About the border of the lesions pigmentary deposits were often observed and mitoses were numerous. In a few instances, horizontal fissuring just above the level of the malpighian layer was observed.

As regards the corium, in sections of the early lesions there was very little evidence of any pathological change, except where the mechanical pressure of the plug was greatest, which was confined to the upper layer of the corium and formed foci consisting of leucocytes, lymphocytes, plasma-cells, connective-tissue cells and, occasionally, mast cells. The main difference between the various lesions lay in the amount and character of the cellular infiltration, due to hyperkeratosis and its varying influence upon the underlying corium. From the histological picture of the larger lesions, involving the proliferation of the epithelial cells, one might almost anticipate a change to epithelioma. Bowen in his able paper (*Jour. Cut. Dis.*, June, 1896, vol. XIV., p. 209) says: "No instance has yet been recorded where this epithelial activity took on a malignant character, but it would not be strange if such were exceptionally the case, in view of the fact that in other examples of keratosis such has been observed": but there was nothing in his microscopical findings to have suggested malignant transformation. The only suspicion worthy of note is one emanating from Darier (*International Atlas of Rare Skin Diseases*, 1893), in reference to the histological findings of a lesion removed from the inguinal region, showing ramifying epithelial processes separated by strands of connective-tissue, which he compared to papilloma or epithelioma. From the histological records of cases of keratosis follicularis, this has been considered a non-malignant affection and for that reason it is hard to appreciate the striking individuality of the case here recorded. It is not easy to believe that the unique appearance could so exactly correspond



to that affection instead of representing a precancerous condition, for histologically one could, from the very inception, which was a benign condition, trace the gradual development to a well-pronounced epithelial cancer. In the next-sized lesions, which showed some variance from the smaller types that characterize the lesions of keratosis follicularis, and which clinically suggest the superficial discoid variety of epithelioma, there was a lessening of the horny material with marked inflammatory reaction on the part of the corium. In this type of lesion the excessive epithelium seemed to penetrate into the underlying tissue, displaying also ramifying epithelial processes separated by connective-tissue. Early in the course of development there appeared another type which seemed to have gone on from the hyperkeratosis representing keratosis follicularis to a further pronounced proliferation above the skin and to have produced cutaneous horns, with a gradual invasion of epithelial cells into the deeper tissue; until finally the superficial horny material ceased its excessive proliferation and the remaining portion showed active development at the periphery. The essential feature of this variety was very little proliferation of epithelium, and its growth into the deeper tissues marked an inflammatory change, while, later, there was increase in the epithelium and the formation of cell-nests. In the papillary variety, there was an excessive downgrowth of the inter-papillary processes of the rete, and from this there were secondary outgrowths which finally became detached and appeared as isolated masses of cells forming the characteristic cell-"pearls." The connective-tissue of the part into which the growth had penetrated, as well as the underlying adipose tissue, was infiltrated with epithelial cells. Little evidence of an inflammatory process was present, but the entire growth was composed of cell-nests, pointing towards a benign variety of skin cancer.

The ulcerative form presented the excessive proliferation of epithelium underneath, i. e., in the upper and middle portions of the corium, consisting of numerous round, oval and irregular masses of epithelium, the greater number of which contained a central cavity in which there was a quantity of granular debris. Microscopical examination of this growth showed more marked malignant features than were found elsewhere, as the entire corium was infiltrated with ramifications of epithelium, with numerous cell-nests which extended into the adipose tissue as well.

*Cells of Anomalous Type.*—In the middle and lower layers of the rete and in immediate juxtaposition with the base of the horny



plug, the epithelium showed cells about twice the size of the prickle-cell, having almost homogeneous protoplasm and a dark-stained nucleus and having lost their filaments of union. At this locality they presented a uniform appearance, but, apart from this, the types showed many modifications, undoubtedly due to irregular keratinization of the cells, as they appeared in the upper layer of the early epithelioma and the largest lesions without any marked underlying inflammatory reaction. The cells were round or oval and had a faintly stained nucleus, with a darkly staining ectoplasm; at times they appeared to contain vacuoles, and their nuclei were crowded to the cell-border. There was another type of cell which was found irregularly distributed among the lesions. In these there were appearances of œdema with an active nuclear division, often resulting in several nuclei. These and other forms appeared singly or in groups and were situated among the epithelial cells. In the smaller epithelioma, where the transformation had taken place at the beginning of the breaking through of the basal membrane, their presence was not a marked feature; but in the more advanced lesions they were irregularly distributed among the horny cells, invariably appearing singly instead of in groups, as in the malpighian layer of the early lesions. They were often of an unusual size and of irregular shape.

*Etiology:* It is difficult to determine what inference should be drawn as to the nature of the affection described and the relation of one phase to another. From the histological examination, the essential part of the early process was that of hyperkeratosis, which apparently took its origin anywhere in the epithelial tissues, the inter-follicular or follicular cells. Some of the best authorities consider keratosis follicularis of inflammatory origin. The histological examination of the earliest lesions shows very little evidence of such origin and what factor brings about this cell change it is hard to determine. Mechanical irritation will bring on a hyperkeratosis—as, for instance, the common wart or corn. Such an origin could hardly be presumed in this case, as there was nothing in the occupation of the patient calculated to bring about irritation of the skin. The question of toxic origin has been carefully considered. Poisoning by arsenic or other drugs can be excluded. It is possible that the condition may be due to local parasitic action. This case presents a number of clinical features which suggest the possibility of its being an infection, but nothing positive to that effect has been observed. The theory advanced by Darier that this variety of keratosis is due to the presence of psorosperms or coccidea has been

abandoned even by the propounders. It has been demonstrated to the satisfaction of the majority of authorities that the so-called psorosperm is due to a cell transformation.

The alteration of the epidermis observed in keratosis follicularis has attracted particular attention and merits special consideration. How, then, shall we account for this marked deviation in course and prognosis? All this seems to contradict the accuracy of the claim that here is a disease characterized by a hyperkeratosis universally regarded hitherto as benign in character. It is hardly possible that so many of the lesions in this case have undergone a secondary malignant transformation, by mere coincidence; although that does happen in other precancerous conditions, such as cutaneous horns, senile keratosis, xeroderma pigmentosum, arsenical verrucosis, hyperkeratosis, chimney-sweep keratosis and keratosis resulting from X-ray dermatitis; and it is likely that such a transformation would have occurred in any of the lesions of this case when sufficient time had elapsed. Multiple epithelioma does occur when the antecedent lesions are multiple, as in xeroderma pigmentosum, although the pathology of the primary lesions of that disease is entirely different from that of the case under consideration.

Regarding the transformation of the keratosis to epithelioma, it is reasonable to suppose that the abnormal hypertrophy of the epidermis may be due to some agent, possibly parasitic, acting upon or entering into the tissues and subsequently creating disturbance of the equilibrium normally existing between these tissues by which they are kept within their proper bounds.

The significance of this case is largely to be found in the direction which certain lines of modern research in cancer have taken within the last few years; notably that line of investigation of which Borrel (*Bul. de l'Inst. Pasteur*, 1907, V. 497, 545, 593, 641) is the principal exponent, which has sought to correlate certain highly infectious skin diseases, pre-eminently the epithelioses, with cancer, on the basis of certain cell-inclusions found in all these diseases. Borrel and his associates look upon these cell-inclusions as characteristic accompaniments of the disease in which they are found, being not in themselves parasites, but evidence of parasitic activity and representing local degeneration of the protoplasm, the result of a direct action by the infective agent or virus which they hold to be the cause of these various diseases. Previously, certain peculiar pseudo-coccideal bodies were found by a large number of observers in epithelioses, molluscum contagiosum, Paget's disease, herpes zoster, senile kera-

toma and keratosis follicularis, and these were looked upon by their discoverers as psorosperms. This view has gradually given place to a different interpretation, even by those who hold the disease to be parasitic. In some instances observers have considered these peculiar bodies as the result of anomalous types of cornification. Darier, who at one time was a strong advocate of the view that these bodies were parasitic, now admits that the pseudo-coccideal bodies are epithelial cells having lost their elements of union and undergone special degeneration, mucous, hyaline or parakeratotic. The general pathologist has persistently refused to see anything in them but cell-degenerations of various types. Assuming, then, that these cell-inclusions are degenerations, but characteristic of a certain group of skin diseases as well as of precancerous conditions, and that their cause is yet undetermined, the assertion that psorosperms are found in epithelioma points to a possible solution of the question of the origin of cancer. In cases of chronic skin dermatoses, in which such inclusions are found, and which can be brought into direct connection with cancer, this view is of great importance. It is claimed by pathologists that epitheliomas and cancer have nothing in common. The first is a group of infectious, self-limited diseases, which produce a marked degree of immunity: with limited amount of proliferation of the epithelium the dissemination of the lesions is general, while in cancer the disease begins as a single lesion with the distinguishing characteristics of active and limitless proliferation of epithelium.

Ribbert (*Archiv.* V. CXXXV., p. 433, 469, V. CXLI., p. 153, 177) concedes a more or less direct relationship of previous inflammatory processes in the connective-tissue,—which invariably have existed between the elastica and the epithelium,—to the beginning site of the carcinoma. It has also been considered, by other observers, that in given cases parasites may be the cause of this special inflammatory process which, through disturbances in the equilibrium of the epithelium, free it from its connections and thus indirectly lead to proliferation. They do not, however, concede that parasites can have more than a secondary relation to cancer; nor do they believe that an epithelial cell, once started on a course of proliferation, requires the stimulus of any agent for its continued propagation. The interpretation of the inclusions found in a group of benign skin diseases, as etiologically related to cancer, is of course at variance with this point of view, inasmuch as such inclusions are found in a



number of diseases mentioned, and, in a limited way, in many kinds of cancers. The significance of this case is chiefly as an additional factor in showing a certain relationship between this group of skin lesions and cancer by a direct development from one to the other. Senile keratoma and Paget's disease are recognized as types of pre-cancerous conditions which ultimately take on every malignant characteristic. Keratosis follicularis, in the light of the case reported, appears to be one more condition of this character. Until the present observation, so far as ascertained, no case of malignant transformation has taken place. This fact was frequently emphasized as an argument against the intrinsic relation of epithelioma to a disease with characteristic inclusions, presenting certain anomalous types of epithelial proliferation, and, which, until the present observation, failed to furnish the final link of evidence necessary to correlation between it and epithelioma.

In conclusion, I wish to express my sincere thanks to my colleagues, Drs. Harry Gaylord, Charles G. Bentz, Herbert U. Williams and Irving P. Lyon, with whom I was privileged to confer in the preparation of this article. Also to Dr. Damon R. Averell, photomicrographer to Gratwick Laboratory, for the excellent reproductions.

#### DESCRIPTION OF PLATES.

Fig. 1. Photograph taken after several X-ray treatments, showing that numerous superficial epitheliomas had disappeared, although in the one above the left nipple, bearing three horny projections, the affection was not wholly wanting. The remaining lesions were hyperkeratoses from their inception to the point where they underwent epitheliomatous degeneration.

Fig. 2. Back view of same patient, showing the entire process from the inception to the epitheliomatous stage. Taken eight months after patient came under treatment—the spots along the spine are scars due to the removal of epitheliomas.

Fig. 3. Epithelioma, deep-seated, crateriform variety.

Fig. 4. Horny spines penetrating the skin, which is slightly raised around them.

Fig. 5. Enormous hyperkeratosis in dome-shaped lesions above the skin. Hyperplasia of the granular and mucous layers. Circumscribed cell-nests beneath the lesions.

Fig. 6. Excessive hyperkeratosis, with horny plug extending into a pilo-sebaceous follicle, showing the blunt thickening inter-papillary processes and the cellular infiltration in the papillary layer of the corium.





FIG. 1.





FIG. 2.







FIG. 4.



FIG. 3.





FIG. 5.

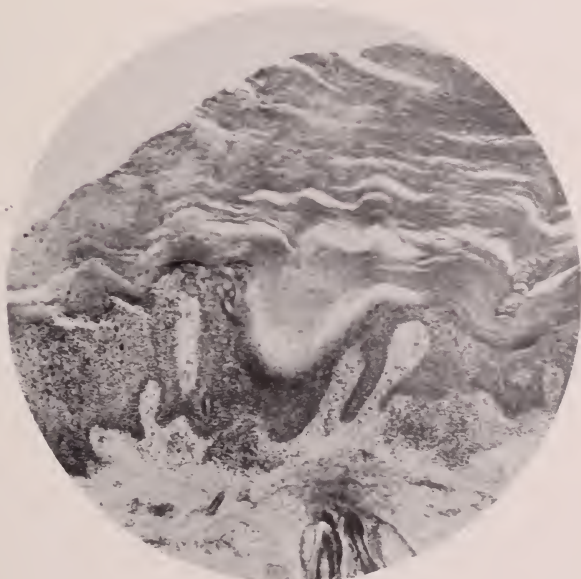


FIG. 6.





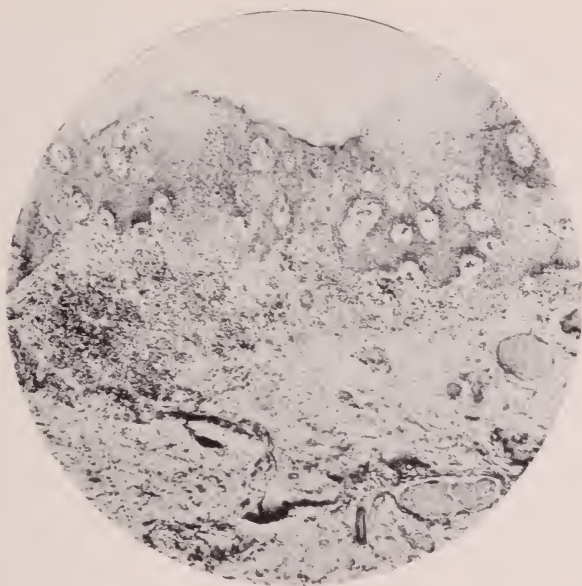


FIG. 7.

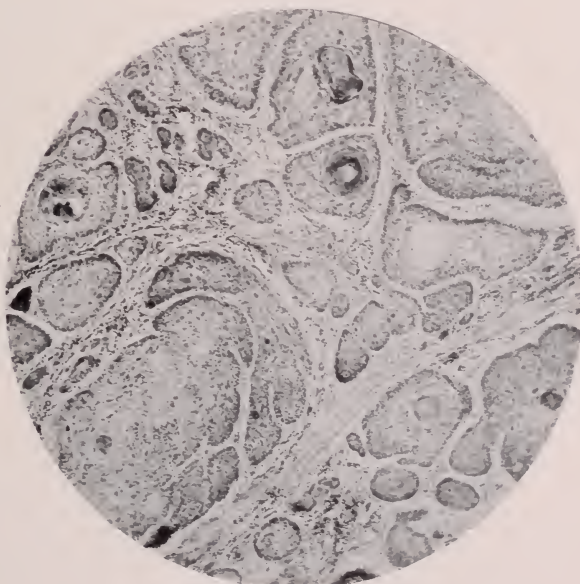


FIG. 8.



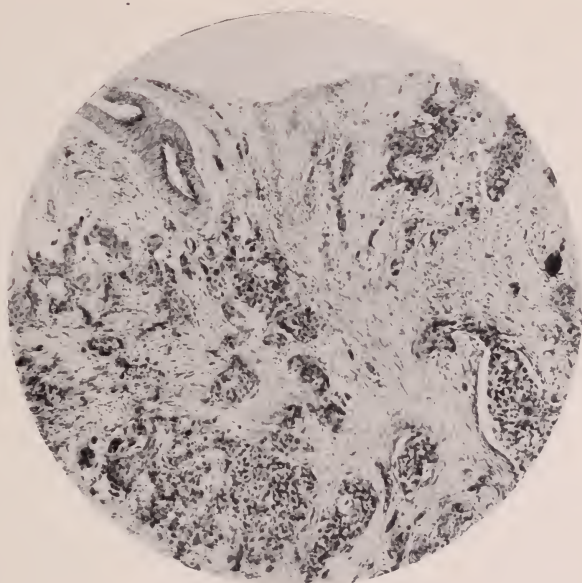


FIG. 9.

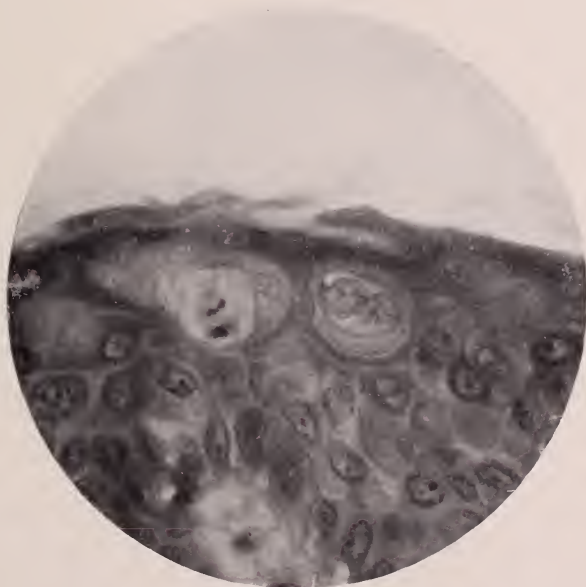


FIG. 10.





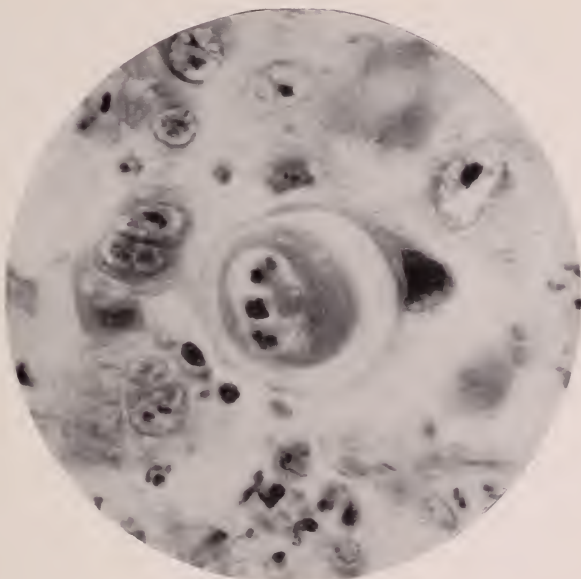


FIG. 11.

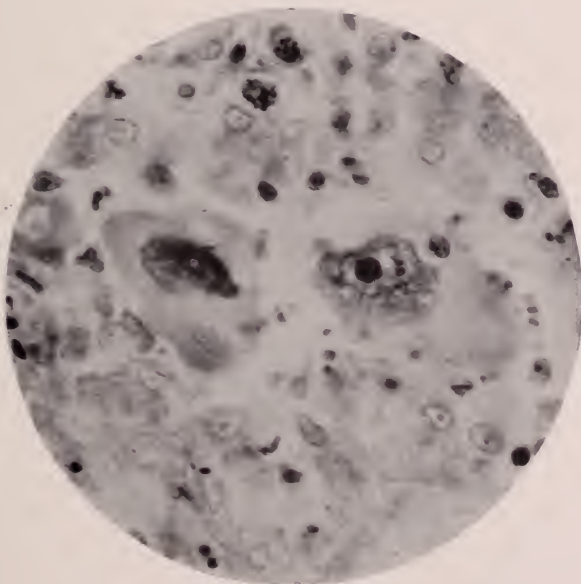


FIG. 12.



- Fig. 7. Almost complete disappearance of the horny layer and the thickened granular layer, with the formation of circular spaces and inflammatory cellular infiltration in the papillary and sub-papillary layers of the corium.
- Fig. 8. Cross sections of the papillary variety of epithelioma. The field is composed of proliferating epithelium in many places formed into concentric structures (epithelial pearls).
- Fig. 9. Area of Ulceration. The surface of the corium is denuded of epidermis. A large mass of epithelium proliferation in the deeper structures and in the adipose tissue, forming cell "pearls." Dense infiltration with lymphocytes, plasma cells and polynuclear leucocytes.
- Fig. 10. Section of the rete highly magnified. Great increase in size of the epidermal cells (pseudo-coccidium), which have a faintly-stained nucleus and a wide and darkly-stained ectoplasm.
- Fig. 11. Section from epithelioma showing unusual large cell with a well-defined and darkly-colored ectoplasm, and a well-stained nucleus, possibly holding an epithelial cell with three leucocytes.
- Fig. 12. Another variety of large epithelial cells found in the deeper structures of epithelioma, with large granular nucleus and a faintly-stained protoplasm.

# A CASE OF XANTHOMA DIABETICORUM AND LIPOMA MULTIPLEX AND A CASE OF XANTHOMA APPROACHING THE DIABETIC TYPE WITH DIABETES INSIPIDUS.

By WM. ALLEN PUSEY, A. M., M. D., and O. P. JOHNSTONE, M. S.,  
M. D.,\* Chicago.

Read before the 32nd Annual Meeting of the American Dermatological Association, Annapolis, September 25, 1908.

**A**SIDE from the extreme rarity of the skin lesions which the two cases to be described present, the cases are interesting from the following facts: In the first case xanthoma diabeticorum occurred in a patient with multiple lipomata. In the second case xanthoma multiplex resembling in some respects the diabetic type was associated, not with saccharine diabetes, but with diabetes insipidus. In Case 1 the multiple lipomata are probably only a part of the general adipose tendency of the patient. They have been present at least since adolescence and presumably very much longer than the diabetes. They are in all probability entirely independent of the xanthoma, except in so far as the diabetes is an expression of the adipose state. In view of the fact, however, that some investigators have seen a relationship between xanthoma and lipoma, the combination is at least an interesting coincidence.

## CASE I.—XANTHOMA DIABETICORUM.

Man, aged 42 years, Irish, twenty years in the United States, bartender, referred to me March 27, 1907, from the dispensary of St. Luke's Hospital.

His father and mother, two brothers and six sisters, are living and well. One sister died aged 22; she was very stout and had been ailing over a year.

The patient has had no previous illness except variola and measles when a child. He is very fat, height 5 feet 7½ inches, weight 298 pounds. He is a free drinker of alcoholic liquors and a heavy

\* Dr. Johnstone is responsible for the report of the microscopical findings; Dr. Pusey for the remainder of the paper.



eater. In spite of his great weight he has always regarded himself as vigorous until recently. In the summer of 1906 he had several attacks of prickly heat, and following this he noticed on the wrists and knees the lesion for which he seeks advice. He also thinks he had more thirst than usual and he was having two or three nocturnal urinations. He has felt perfectly well and has been working every day except during an attack of influenza, which he had six weeks ago. He has noticed no change in his appetite and thinks he has not decreased in weight. There are no eye symptoms and no headaches; the bowels are regular; and he has had no skin symptoms except the prickly heat and the present eruption.

*Examination.*—Physical examination, except as given below, negative. Scattered over the body are numerous lipomata varying in size from a hazel-nut to an orange. They are literally innumerable; at almost any point upon the trunk they can be found by careful palpation. The largest are on the upper extremities; there are nine on the left arm and about the same number on the right. Some of these are four or five inches long in diameter and have been present for at least twenty-five years. Throughout the anterior abdominal wall are many small tumors. On the lower extremities also there are many, but none as large as those on the upper extremities. Xanthoma lesions in great numbers are present over the body, except the scalp and face. On the face there is one lesion on the right cheek. The xanthomata vary in size from a small pinhead to a grain of wheat, and there are a few larger lesions formed by the confluence of adjacent lesions. The lesions for the most part consist of a sulphur yellow tip upon a bright inflammatory base. Except upon close inspection they would be taken for pustules; in fact, the patient and others have incised them in an effort to remove the yellow material, and have been puzzled to get only blood. A few lesions are inflammatory without the development of the xanthoma tip. About the wrists some of the lesions are excoriated upon the tip, for, while the itching is not sufficient to greatly disturb the patient, it causes him to scratch moderately. The lesions show a distinct tendency to arrangement in lines and groups. They are most numerous about the wrists, elbows, posterior surfaces of the arms, anterior surfaces of knees, inner and posterior aspects of thighs, and upon the buttocks. Some are found as far down as below the ankles. There are none on the palms or soles, or the mucous membranes. They are very hard, and give the surface a peculiar nutmeg-grater feel.

The diagnosis of diabetes was made from the cutaneous lesions and confirmed by the urinary findings. The examination of the urine when the patient was first seen, on March 21, 1907, showed a total quantity of 4500 cc., specific gravity 1028, color pale, reaction acid, sugar 2.5-10%, no albumen, and no significant microscopical findings. Under treatment begun at this time there was prompt and continuous improvement in the condition of the urine. The last trace of sugar was found on July 13, 1907. Since that time the urinary examinations have always shown approximately a total quantity of 2000 cc., of specific gravity 1023 to 1026, and without abnormal findings. The improvement in the xanthoma progressed *pari passu* with the improvement in the condition of the urine. By August 1 the only traces of xanthoma left were fading brown macules, and since November, 1907, he has been free from all evidences of xanthoma.

CASE II.—XANTHOMA APPROACHING THE DIABETIC TYPE IN ASSOCIATION WITH DIABETES INSIPIDUS.\*

This patient, a boy 18 years old, native of Germany, but since early childhood in the United States, was seen by me several times in March, 1904, for Dr. S. R. Pietrowicz, in St. Mary's Hospital. For the privilege of publishing the case and for the opportunity to study it again in 1908, I am indebted to the courtesy of Dr. Pietrowicz. For the following accurate description of the case, made in 1904, I am indebted to Dr. W. T. Woods, interne in the hospital.

*Family History.*—Parents alive and well. One sister, well.

*History.*—Mild attacks of measles at ten years of age, from which he recovered uneventfully. Some acute gastro-intestinal disorder two years ago. No venereal history. Does not use tobacco or alcohol. Appetite always has been poor. Bowels regular. Present illness began four years ago with itching on shoulders, eyelids and penis, aggravated by scratching. This came on at intervals and persisted for about a month, when patient noticed an eruption appearing simultaneously on shoulders, eyelids, and penis and scrotum. This consisted of small discrete papules, reddish in color. These gradually increased in number and size and changed in color to dark

\* This case was reported, with especial reference to the laryngeal findings, in the *Laryngoscope* for October, 1906, by Dr. John Edwin Rhodes, to whom I am indebted for the privilege of using the facts of his report. There is also a brief reference to the case with an illustration of the lesions on the penis in Hyde and Montgomery's work on Dermatology.

brown. About two years ago patient began to be continually thirsty and since then drinks large amounts of water. At that time he also noticed that he was passing an excessive amount of urine. Eight months ago he began to have spells of dizziness and faintness lasting about two minutes. These occurred at intervals of two or three weeks at first, but have steadily increased until the present time, March, 1904, when they occur four to seven times a day. For the last six months his voice has been hoarse. Patient says he has not grown very perceptibly in last four years.

*Present Condition.*—Patient is very small for his age. Fairly well nourished. Color good. Cheeks rosy and skin very delicate. Appetite good except in morning. Bowels regular. Tongue clean. When he puts his finger down his throat he can feel lumps there. From four to eight times a day he has attacks of faintness and dizziness and feels "sick in his throat." During these attacks he always asks for drinks of cold water, but the water does not seem to relieve his sensations. During these attacks the pulse rate is increased to 100 or 110 per minute, but no abnormal heart sounds can be heard. He says these attacks are increasing in length and severity. He drinks much water: averages a tumbler full every half hour, taken in small quantities very frequently, but still feels thirsty after drinking.

He urinates ten to twelve times a day and two or three times during the night, passing a large quantity at each time.

*Head.*—Upper and lower eyelids are covered with a papular eruption varying in size from a pinhead to a millet-seed, and in color from red in small papules to a glistening light yellow or bronze in the larger ones, which are confluent. Right eye presents a tumor one cm. long and one-half cm. wide involving cornea and sclera. This is light yellow in color and gives rise to no discomfort. Left eye presents two smaller papules of same type. Conjunctival vessels are slightly congested. Mouth presents small discrete papules on inside of lips. Nasal cavities normal, except thickened septum on left side. Uvula thickened, somewhat nodular and congested. Tonsils moderately enlarged. Right ragged in appearance at upper part. The nodular condition involves upper part of right tonsil and right pillar. Pharynx normal. Alveolar processes normal, as are also buccal surfaces. Soft palate shows irregular areas of congestion which are not elevated. Epiglottis, tip somewhat thickened. Arytenoid enlarged and nodular in appearance, also thickened to about twice its normal size. The interarytenoid muscle also nodular. Base of tongue normal.



*Chest.*—Neck and shoulders present eruption extending to nipples in front and over scapular region behind, consisting of large and small confluent and discrete papules of dark brown color. The largest is size of a split pea. These are dry and have very fine glistening white scales. They invade the superficial layer of skin only and seem to lie on top of the skin. No induration, skin everywhere exceptionally soft and delicate. No hair in axilla. Heart and lungs normal. Abdomen normal. A few brown papules scattered over surface. Penis and scrotum present large dry tubercles covering entire surface of penis and nearly all of scrotum. These masses range in size from a split pea to a bean. Some small papules on inner aspect of thighs and two or three near anus. Hair on pubes very fine and scanty. Patellar reflexes normal.

Two years after his first residence in the hospital he returned, in May, 1906. He was greatly run down at the time and suffering severely from difficult breathing. He was weak, his appetite was poor, he was still passing a very large quantity of urine, and had declined in weight from 120 to 99 pounds. At this time he was referred to Dr. Rhodes, and a tracheotomy was found by Dr. Rhodes to be necessary in order to relieve the laryngeal stenosis. Since May, 1906, he has worn a tracheal tube, and, with the relief of the obstruction to breathing which this has afforded, he has improved greatly in health. Now (January, 1908), at the age of 22, he is a fairly vigorous-looking young man, well nourished, and of good color, though somewhat undersized—height, 5 feet 4 inches; weight, 137 pounds. He no longer has vertigo. The urinary findings at all times that he has been under observation have been practically uniform. There has been a profuse polyuria of almost colorless urine, of specific gravity 1002 to 1006 or 1007, without sugar or albumen or significant microscopical findings. In May, 1906, Dr. Rhodes found a total quantity of 4600 cc., with specific gravity 1002. In repeated examinations in January and February, 1908, I found the urine of specific gravity 1002 to 1005. The total quantity on the two occasions when it was measured was 8400 cc. and 6720 cc. At no time has sugar been detected in the urine by tests with copper sulphate. The very low specific gravity excludes forms of sugar which would reduce copper sulphate.

At the present time, January, 1908, the eruption exists in about the distribution that it showed in 1904, although the lesions over the body are smaller and less prominent than they were. The lesions on the eyelids have entirely disappeared, except at the inner canthi. Both lids of both eyes are involved at the inner canthi for about



one-fourth of an inch in yellow, non-inflammatory xanthoma lesions, indistinguishable from simple xanthomata. The large lesion in the cornea and sclera of the right eye persists. It is yellow, and non-inflammatory, but dilated vessels course over it and to it over the sclera. Two smaller lesions similar to this, one at the upper border, the other at the lower border of the cornea, are present in the left eye. These once disappeared and have returned. There have never been any lesions on palms or soles, or over elbows or knees.

This case presents an intermediate form clinically between xanthoma diabeticorum and xanthoma multiplex, with a preponderance of features of xanthoma diabeticorum. The lesions at the beginning were inflammatory and itched, like xanthoma diabeticorum. Most of those now present are brown to yellow, like those of xanthoma multiplex. The course of the disease with lesions disappearing and returning is that of xanthoma diabeticorum, and distinctly not that of xanthoma multiplex. There have been no lesions on palms and soles, knees or elbows, sites of predilection for xanthoma multiplex; while on the other hand the lesions have encircled the eyelids—a characteristic location for simplex xanthoma and a very rare one for xanthoma diabeticorum.

While upon this topic of intermediate cases between xanthoma diabeticorum and xanthoma multiplex, it is interesting to remember Darier's case, in which ordinary xanthoma multiplex occurred with diabetes mellitus in an obese patient, and Pollitzer's intermediate case, with diabetes mellitus in a 17-year-old boy.

These intermediate cases—Darier's and Pollitzer's, with the usual xanthoma multiplex occurring in diabetes mellitus, mine with xanthoma of the diabetic type occurring in non-saccharine polyuria—suggest strongly that all of the generalized forms of xanthoma are related, and that xanthoma diabeticorum is not something *sui generis*, but is only the most acute form of the eruption of xanthoma.

A few other cases of xanthoma diabeticorum without glycosuria have been described, but nearly all have been in the obese diabetic type of individuals. Crocker in his work refers to xanthoma planum in an individual with diabetes insipidus, but so far as I know no other case of xanthoma resembling the diabetic type has been observed in association with non-saccharine diabetes.

#### HISTOPATHOLOGY.

*Case I. (X. diabeticorum).*—Two lesions taken from the wrist

were examined in the case of xanthoma diabeticorum, one lesion being considerably smaller than the other. Both lesions involve nearly the entire section. The lesions do not have a sharply circumscribed outline, but fade out gradually into normal tissue and are not encapsulated. The epidermis over the smaller lesion is thinned, but intact; over the larger one, broken at the apex, which, however, appears to be due to an excoriation, and not a part of the process. The granular layer is increased to five or six layers at the borders of the lesion and consists of but one or two layers over the apex. The papillæ are obliterated over the lesion, and are increased in length at its borders. There is a slight infiltration of round cells and polynuclear leucocytes, somewhat more pronounced and patchy in the larger lesion. The infiltration shows a slight tendency to be more marked around the lymph and blood vessels. The lymph vessels are dilated. But few blood vessels are present in the lesion. Their walls show degenerative changes and some infiltration with round cells. A few are seen with much thickened walls which are densely cellular throughout; the cells have oval, deeply staining nuclei, and obliterate the different parts of the vessel wall.

The connective tissue cells appear swollen and granular, and show degenerative changes in varying degree. In some the nuclei stain well; in others, poorly; while many cells take no nuclear stain. The fibers are granular, vacuolated, and fragmented in varying degree, in many cases appearing as masses of granular eosin-staining debris in which a few fragmented nuclei still persist. The degenerative changes are irregular in distribution, some areas showing no nuclei or normal cells remaining; others very few, scattered singly or in clumps, in masses of debris and cell fragments; while in still other areas the nuclei and cell outlines are fairly well preserved. The degenerative changes are more marked in the central portion of the lesion. The connective tissue remaining is arranged in bands, individual fibers, and areas of interlacing fibers. They take the picrofuchsin stain well and are quite dense at the borders of the lesion, but become fewer in number and lose their staining power more and more toward the center of the lesion, where they fail entirely to take the stain. The elastic fibers likewise are fairly normal in number and staining qualities at the borders of the lesion, but become fewer and lose their staining power toward the center of the lesion, where they, too, are absent.

There has been a very marked hyperplasia of endothelial cells, which appear in rows, columns, and areas of varying size, separated

by fine fibers or bands of connective tissue. Vacuoles resembling places left by dissolved fat are present and very pronounced in the endothelial cells and to a much less extent in the connective tissue cells. In some areas in the middle and deeper portions of the lesion merely the outlines and nuclei of the endothelial cells remain. No fat stain was made in the fresh tissues. No giant cells or so-called "xanthoma bodies" are seen in the smaller lesion; in the larger one they are fairly numerous. Several are seen which appear unquestionably to have arisen from the fusion of endothelial cells. Hair follicles are present in the border of the lesion. No sweat glands are seen in any of the sections examined. No plasma or mast cells are present in the body of the lesion, but a very few are seen about the borders (polychrome-blue stain).

*Case II.*—In the case of xanthoma with diabetes insipidus, one lesion, taken from the shoulder, was examined. This lesion also involved practically the entire section, so the tissues beyond could not be studied. The lesion is definitely circumscribed and surrounded by a dense, hyaline connective tissue capsule about 1-10 mm. thick. The epithelial layer is thin, and the papillæ low and broad. The deeper cells of the rete contain more yellowish-brown pigment than normal. Small areas of infiltration with round cells and leucocytes are seen, some being in relation to the blood and lymph vessels. The walls of the blood vessels, which are few in number, are thickened, their outer part being hyaline, the inner half very cellular, the lumen in some cases being nearly obliterated. A few dilated lymph spaces are seen.

The lesion consists mainly of rather dense interlacing strands of connective tissue, which stains well with picrofuchsin or polychrome-orcein stains, and young connective tissue cells and formative cells of various sizes and shapes. The distribution of the mature and young connective tissue is fairly uniform, the former making a network in the meshes of which the younger cells are seen. The nuclei stain well as a rule, and the cells and fibers show but slight degenerative changes, except that they are swollen and granular, and in places show moderate vacuolation, as if from dissolved fat. The vacuoles are, as a rule, very small and of irregular distribution. No fat stain was made in the fresh tissue. No elastic fibers are present in the lesion except in the walls of the blood vessels, and most of these do not show elastic fibers.

Scattered within the meshes of the connective tissue network in addition to the formative and young connective tissue cells are nu-



merous endothelial cells, irregularly distributed singly or in small masses. They show moderate vacuolation, more marked, however, than that of the connective tissue elements. Giant cells or "xanthoma bodies" are exceedingly numerous, from three to six, and sometimes twelve or fifteen, showing in a single field of the 1-6 objective and one-inch eye-piece, and giving the section an appearance not unlike a giant-cell sarcoma. These apparently originate from the newly formed connective tissue elements. All forms, from relatively small more or less spindle-shaped cells with two or three centrally located nuclei to very large cells with fifteen or twenty nuclei, are found. Plasma and mast cells are distributed over the whole section, the mast cells being very numerous, from three to eighteen or twenty being found in a single field of the 1-6 objective and one-inch eye-piece (polychrome-blue stain). Hair follicles and sweat glands are both present in the lesion, one of the latter penetrating through the capsule at the base of the lesion. A few mitotic figures are found in the formative connective tissue cells.

#### SUMMARY OF THE HISTOLOGICAL FINDINGS.

The striking features of the lesion in the diabetes insipidus case are a chronic hyperplastic process, characterized by a marked hyperplasia of connective tissue, with proliferation of endothelium to a lesser degree, and a moderate fatty infiltration of the newly formed element, the whole being definitely circumscribed and encapsulated and resembling a benign neoplasm. The resemblance to a neoplasm is the more striking in that the proliferation of connective tissue is not accompanied by marked round cell infiltration such as usually occurs in inflammatory connective tissue proliferation. Xanthoma bodies are striking in their abundance and appear to arise from the connective tissue elements. Mast cells are very numerous throughout the lesion, while elastic tissue is wanting. In the lesions of xanthoma diabeticorum the endothelial hyperplasia, the degenerative changes, and the marked fatty changes are the striking features in the picture. The lesions are not sharply circumscribed nor encapsulated; the xanthoma bodies are not striking in their number and appear to arise from endothelium; mast cells are absent in the lesion; while elastic tissue has apparently been present throughout the lesion, but has lost its staining power through degenerative changes.

While there are thus many differences apparently in the two pictures, there are also many points of resemblance. Both show





FIG. 1.



FIG. 2.



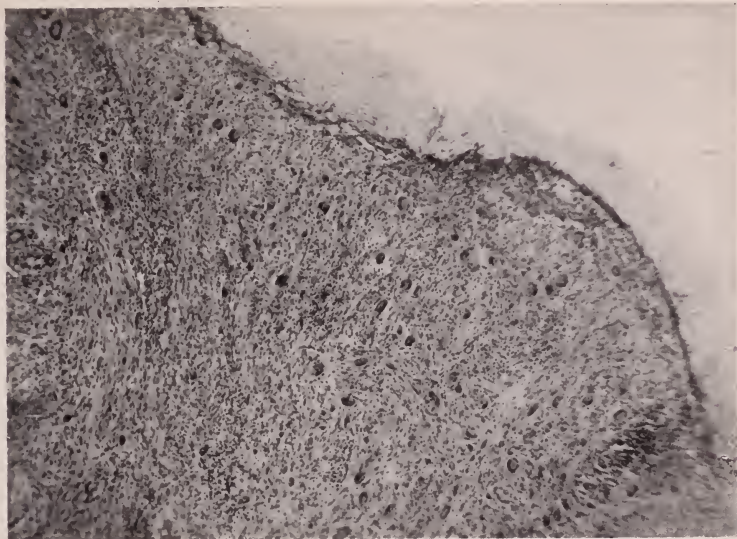


FIG. 3.



FIG. 4.

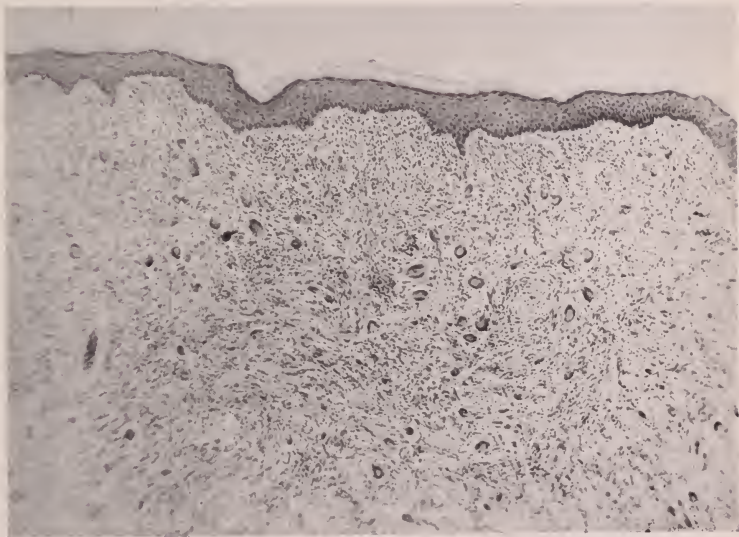


FIG. 5.







FIG. 6.



endothelial proliferation; both show degenerative changes, particularly fatty infiltration; both show giant cells, the so-called xanthoma bodies; both show similar involvement of the lymph and blood vessels, with slight perivascular infiltration; both are superficial lesions in the corium.

The question arises, Is there sufficient in common in the two histological findings to form any basis for an estimate as to the probability of the two processes being closely related conditions? The xanthoma diabeticorum lesion is evidently a much shorter and more acute process, as evidenced by the hyperplasia of endothelium and the marked degenerative changes without connective tissue proliferation; while it is equally evident that the xanthoma lesion in the diabetes insipidus case is a very chronic process. These facts are borne out by the clinical histories. How many of the differences in the two pictures can be accounted for by this difference in the acuteness or chronicity of the processes? It is a well-recognized fact that chronic processes tend to the formation of connective tissue, and if localized tend to become more or less definitely encapsulated, while marked degenerative processes are more often associated with acute conditions. Mast cells tend to occur in chronic rather than acute processes. Giant cells tend to arise from the more actively proliferating elements—hence from the connective tissue in the one case, from the endothelium in the other. Elastic fibers are a late product of mature connective tissue, hence one would not expect to find them in the hyperplastic lesion; in the acute lesion they are probably the elastic fibers of the normal corium, which have not yet disappeared entirely. The involvement of the lymph and blood vessels in both may point to a common cause of the two conditions—i. e., possibly an intoxication through the blood and lymph. Furthermore, attention may be called to the fact that the two histological pictures are in many ways analogous to the pictures in acute and chronic adenitis, produced by the intoxications of acute and chronic infectious diseases—in the former a marked hyperplasia of endothelium, in the latter a hyperplasia of connective tissue without the typical round cell infiltration observed in chronic inflammatory processes. The main difference here is the formation of the giant cells in the xanthoma lesions, which we do not observe in the adenitis of acute and chronic infectious diseases, as a rule. But even in this connection it must be noted that examples are not wanting or even rare in certain classes of diseases where all forms of giant cells and cell inclusions are met with in hyperplasias of endothelium and

connective tissue of lymphoid structures, as in the various leukæmias and related conditions, Rocky Mountain spotted fever, etc.

Thus it would appear that the rather striking differences in the two xanthoma pictures may be accounted for without any great stretch of the imagination by the difference in duration and acuteness of the two processes. Possibly this difference in the acuteness or chronicity of the processes is in turn due to intoxications by different irritating substances circulating in the body fluids.

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### NÆVUS UNIUS LATERIS: REPORT OF A CASE.

By ALFRED SCHALEK, M. D., Omaha, Nebraska.

Professor of Dermatology, University of Nebraska.

Read before the 32nd Annual Meeting of the American Dermatological Association, Annapolis, September 25, 1908.

**N**ÆVI are benign, usually congenital tumors, sometimes of the same structure and appearance as the normal skin, at other times showing a predominance of some of its components, such as the epithelial and the connective tissue, the hair or the pigment. According to Unna, they are embryonic anomalies appearing and slowly developing after birth. Duhring believes that they are almost invariably acquired during later life. They are a common affection, some statistics even showing an occurrence of 100 per cent. in a certain number of people.

The purpose of this paper is to report a case of a unilateral nævus. Some very valuable monographs have been written on this subject. It occupies an exceptional position among the nævi, and is known in the literature by many other names, among which some are linear verrucous nævus, nerve nævus, neuropathic papilloma, etc. It is of rare occurrence, the combined returns of this association in 1905 reporting 0.033 per cent.; that is, ten cases in 30,000 skin diseases.

What makes their study particularly interesting is the fact that their distribution follows certain defined lines of the skin, and is in some cases limited to one-half of the body. Baerensprung<sup>1</sup> was the first to point out this unilateral situation following the course of nerve branches, and believing that it was due to an essential connection named them nerve nævi. In some cases reported the arrangement of herpes zoster is closely imitated.



Clinically the linear nævi show usually a uniform appearance. Characteristic is the warty form arranged in streaks and patches. Their peculiar distribution has given rise to considerable speculation as to their real nature. The theory that there exists any connection between them and the underlying nerves has been abandoned. No anatomical relation has been proven; the course of the nerves is not adhered to strictly enough to assume their influence; even in the unilateral variety, the median line is rarely strictly adhered to, more often the lesions are found scattered across the boundary line. Clinically nervous manifestations have been reported in connection with these nævi, such as headaches, convulsions, and epileptic fits, but these cannot be considered anything but coincidental features. A very complete review of the theories of etiology of this affection is given by D. W. Montgomery.<sup>2</sup> He feels satisfied that the arrangement of the linear nævus is not altogether due to chance. After discussing the different theories, he concludes that the streaks are due to the trend of growth of tissues and the adaptation of embryonic sutures. Philippson<sup>3</sup> believes that Voigt's lines, along which the cutaneous nerves among other tissues develop, are responsible for the course of these nævi. He admits, however, that this apparently does not hold good in all cases and is more pronounced at the beginning of their development. Jadassohn<sup>4</sup> considers these nævi to be neurofibromata which are commonly found along the whole course of the nerves, but which are in this affection scattered into the peripheral parts. He prefers the name used by the French authors, "systematized nævi," as more accurately describing this condition, since the present name does not indicate that the individual lesions are occurring as often in patches as in lines. Blaschko,<sup>5</sup> reviewing the literature, thinks that these nævi are the sequelæ of foetal disturbances of development, to account for which a disease of the nervous system is not necessary.

Histologically soft nævi exhibit a hyperplasia of the connective tissue cells in the papillary layer in circumscribed aggregations. In the linear nævi an additional hypertrophy of the horny layer and a consequent thinning of the rete is found which accounts for their characteristic warty form. Keratohyalin, usually diminished in the soft variety, is strongly developed here, and much more so when the epithelial protoplasm becomes more degenerated.<sup>6</sup>

The diagnosis is easily made from the clinical features mentioned. The linear nævus should not be confounded with linear ichthyosis hystrix on account of a somewhat similar appearance.

This mistake is still found in some recent text-books, where both affections are described under the same heading.<sup>7</sup> The pathological changes are sufficiently distinct to exclude all relation between them. *Ichthyosis hystrix linearis* is the name applied to circumscribed patches of ichthyosis which run in lines and apparently along the course of some nerves. The pathology is mainly one of a low chronic inflammation, cell infiltration and capillary dilatation. The papillæ are flattened and pressed apart by the horny masses above. In the linear nævi an inflammatory condition is an exception and the hypertrophy of the papillæ an essential feature. Clinically, ichthyosis is also quite different. In many of these cases a hereditary predisposition is found. The skin presents a greater degree of thickening, which sometimes even leads to the formation of sharp, horny spines. There is a diminished or entirely absent function of the sebaceous and sudoriferous glands which makes the skin dry, rough and scaly. None of these conditions are seen in the linear nævi, except exceptionally as a coincidence or a complication.

The prognosis of the linear nævus in regards to health and life of the patient is good. Malignant degeneration, known to occur in the other nævi, is not reported in this type, possibly on account of its rare occurrence. Beyond an occasional irritation caused by friction, the macerating effect of perspiration or some strong application, these nævi annoy the patients mainly on account of the disfigurement which they produce. Spreading stops at an early age and is rarely observed after puberty.

The removal of this anomaly is of course a matter of much concern to the patient, especially if it is quite extensive and appearing on the exposed surfaces of the body. It must be undertaken with the view to prevent its recurrence and to save the patient time, pain and bad cosmetic results. The usual therapeutic measures used in other forms of nævi cannot be considered, and electrolysis, galvano-cautery and caustics are for these reasons not applicable. The procedure found most satisfactory by the writer is to snip off the papillary projections with curved scissors, shave off the flatter ones with a sharp razor, finally touching the bleeding surfaces with trichloroacetic acid. In extensive patches of the face skin grafting might be resorted to. Liquid air and carbon dioxide may be of value in these cases.

The case which I wish to report came under my observation March 23, 1908. The patient was a girl, nine years of age, had always been in good health, except that she was anæmic and of a



FIG. 1.





nervous temperament. Her parents are living, the mother in good health, the father suffering from valvular heart disease, and is addicted to the excessive use of alcohol. One brother and two sisters are living and in good health. There is no history of any anomaly or disease of the skin in any member of the family. At the time of the birth of the patient the nævus was noticed to be present on the left heel and the left knee. Six months later a similar lesion appeared on the neck. From this time on the eruption continued to break out in different parts over the whole left side of the body until at the age of one year, when it seemed to be checked with the exception of a few isolated lesions. At the present time numerous irregular and band-like patches of different sizes may be observed. Some are distinctly warty, others only slightly elevated, all more or less pigmented and with a rough surface. The left side is affected principally, and only a few lesions are scattered across the median line. The flexor surfaces are involved more than the extensor sites. The course of nerves seems to be followed closely, especially that of the cervical, intercostal, sacral and lumbar nerves. The patch on the neck extends from the vertebræ backward over the shoulder into the axilla anteriorly, and is composed of numerous small, pointed excrescences, crowded together closely and resembling the surface of a rough, hard-rubber bath brush. The largest patch is found in the left hypogastric region, starting from the line of the umbilicus and gradually thinning out backward toward the sacrum.

The little patient had never had any subjective symptoms, only about six months ago an acute dermatitis set up by strong application caused considerable annoyance, but subsided quickly under a soothing and protecting treatment.

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## PEMPHIGUS AND BULLOUS DERMATOSES AND NOTES ON SOME PERSONALLY OBSERVED CASES.

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UNTIL a few years ago pemphigus and the pemphigoid bullous skin diseases were rarely seen in my practice, but recently these diseases have become fairly common, the increase probably being due to the great influx of certain foreigners. Gottheil,<sup>1</sup> in discussing a paper on pemphigus before the Cutaneous Section of the A. M. A. in 1906, remarked that "pemphigus was not an uncommon disease in certain parts of New York City"; apparently he had been of the opinion that pemphigus was rarely seen in New York, until the great increase of the foreign element. It may be observed in passing that many hitherto rare skin diseases are being more and more frequently seen in our large cities.

During the last two years I have had a number of cases of the pemphigoid type; eight of them were sufficiently interesting to warrant reporting. The first are two cases of pemphigus foliaceus. They were the only ones of this type seen in fifteen years of an exclusive dermatological practice.

### PEMPHIGUS FOLIACEOUS.

The first was in a female aged 58, a native of Ireland. Three years before coming under observation she had had successive crops of blisters, appearing on various parts of the body; the lesions would heal and she would remain well for from one to three months, until, finally, the eruption became general and her condition grew so bad that she was compelled to seek the hospital, entering the dermatological ward of Kings County Hospital, where she remained until she died of exhaustion, about six months later.

The notes taken from the hospital records are as follows:

A fairly well-nourished woman, aged 58; over the trunk, and

upper parts of the arms and thighs, there are a number of large blisters, some of them are intact, but many have ruptured, leaving a dark reddish-brown, raw-looking surface; the unbroken blisters are flaccid and contain a yellowish, purulent-looking fluid.

The skin was never free from the eruption while she was in the hospital. The walls of the bullæ of each successive crop grew more fragile, either rupturing spontaneously or from the slightest traumatism; some of them were from four to six inches in circumference; she lost her hair and nails and rapidly emaciated; toward the end nearly all of the epidermal layer of the skin was exfoliated, leaving a raw, ulcerated surface; her temperature ranged from 98 in the morning to 101 to 102 in the evening, the rise of temperature was especially noticeable just before the advent of new crops of blisters; about two weeks before death a severe diarrhœa began and continued until her demise; there were never any bullæ in the mouth or vagina, nor any vegetations upon the denuded surfaces.

The urine showed nothing, except occasional traces of albumen.

The second case of pemphigus foliaceus was in a male aged 40, a native of the United States. The bullæ first appeared over the trunk and face, and were small and tense, like those of pemphigus vulgaris; later the entire skin became involved; the bullæ changed their character, becoming large and flaccid; there were bullæ in the mouth, but never any vegetations; three months before death, which occurred six months after the first bullæ appeared, the patient presented the typical clinical picture of dermatitis exfoliativa of Hebra; the urine contained from 1 to 5 per cent. of albumen throughout the course of the illness. All treatment, such as arsenic, etc., had no effect upon the progress of the disease. Neither patient seemed to suffer pain, but complained principally of discomfort and extreme weakness.

Unfortunately there were no blood examinations made.

These cases are clinically similar to the three reported by Kreibich,<sup>2</sup> and also some others reported by German and French observers.

From the study of the literature, and of the two cases cited above, one is inclined to believe that pemphigus foliaceus is only a phase of chronic pemphigus vulgaris, voicing, to a certain extent, the views held by Radaeli,<sup>3</sup> who claims that "all the bullous pemphigoid diseases are identical."

The somewhat rapid, fatal termination, and the serious features of the cutaneous disturbance depend, perhaps, upon the loss of systemic and cutaneous resistance.

## AN ANOMALOUS CASE.

The history of the following case is interesting in itself, and I have been unable to find a similar example in the literature.

The patient was shown at the Sixth International Dermatological Congress, but, on account of the rush of the clinical hour, and the great number of cases, the dermatological experts were unable to give it the proper study, consequently no diagnosis was made.

The patient was a young Swedish woman, aged 22; she entered the dermatological service of the Kings County Hospital with the following history:

Two weeks before entering the hospital she noticed a number of small blisters in the groin, axillæ and flexors of the elbows; her throat and tongue were sore; this seemed to have followed the cutaneous eruption rather than precede it; she was a well-nourished girl of splendid physique.

Her entrance examination to the hospital showed groups of hazel-nut-sized, tense, clear blisters in the groin, axillæ and flexors of the arms; the fauces were covered with a pseudo-membrane; the tip of the tongue was raw and sore; temperature 102; she complained of abdominal, muscular and joint pains; there was a mucous discharge from the vagina; repeated examinations of this discharge did not reveal gonococci.

Lassar paste and dusting powders were applied to the diseased areas, and most of the blisters soon burst and the discharge dried into a thin, friable crust.

The bullous eruption lasted about three weeks and did not reappear, but changed into a scaly, para-psoriatic-like eruption, which soon involved the whole cutaneous surface; it was more pronounced over the scalp and abdomen; both the hair and nails were shed later in the disease.

This last eruption first appeared in scaly patches where the blisters had been; almost simultaneously small patches of the same character broke out on other parts of the body; these rapidly increased in size, coalesced until nearly the whole cutaneous covering, especially the trunk, was involved.

Some of the patches cleared in the center and looked much like ringworm. Indeed, the house surgeon, in my absence, treated some of the spots with tincture of iodine, which greatly aggravated the cutaneous condition. The mouth and throat still remained sore, and although no blebs were found, the mucous membrane was shredded, which indicated that they had been present. While the blisters



were present in the groin some of them broke down and their floor was covered with a sticky, foul-smelling exudate, and it was thought that there were small islands of vegetations appearing over the denuded spots, but as these did not increase in size, it probably was a mistake in vision, for I had fully made up my mind that it was a case of pemphigus vegetans.

When the case was shown at the Sixth International Dermatological Congress, six weeks after admission to the hospital, the patient's abdomen, back, neck, arms, scalp, thighs, groin and axilla was the seat of an erythematous, squamous, psoriatic-like eruption; the throat was red, but not sore; the tongue was thickly coated; she had lost her hair and nearly all of her finger and toe-nails, and was greatly emaciated; the temperature averaged about 100; the muscular and joint pains had disappeared, but she still complained of abdominal discomfort.

The only expression regarding diagnosis made at the Congress was that of Dr. H. Radcliffe-Crocker, of London, and Dr. James C. Johnston, of New York, who concurred in the opinion that the cutaneous disturbance was the outcome of some intestinal auto-intoxication.

About three weeks after the patient was shown at the Congress she was taken sick with typhoid fever; she had three hæmorrhages, one in the second, one in the fourth, and one in the fifth week, nearly succumbing to the last; but in spite of the severity of the typhoid she slowly convalesced, and when her health was once fully re-established, her cutaneous disease and abdominal pains had entirely disappeared; she has remained well now for ten months.

The treatment of the patient consisted mainly of tonics, sustaining diet and intestinal antiseptics.

It may be considered that the report of this case does not belong in this paper, but I have placed it here because the first lesions were pemphigoid in character, and hope that the discussion will bring out reports of similar cases.

#### PEMPHIGUS VEGETANS.

About two years ago I reported a case of pemphigus vegetans with a review of the literature.<sup>4</sup> In this case the bacillus pyocyaneus was repeatedly isolated from cultures made from the blood and bullous contents.

The same findings have been reported in a case of pemphigus vegetans by Pernet.<sup>5</sup> Pecori<sup>6</sup> reports finding the pyocyaneus ba-

cillus in a case of pemphigus foliaceus that had been antiseptically treated.

Finding the pyocyaneus bacillus is unusual in these pemphigoid diseases, though, of course, this organism is usually isolated from the secondary bullæ and necrosis which accompany general pyocyanic infection. Lewandowsky<sup>7</sup> has given a complete résumé of the pyocyanic skin affections.

The finding of this same organism (bacillus pyocyaneus) in pemphigus neonatorum makes the following histories of especial interest.

#### PEMPHIGUS, NEONATORUM.

In February, 1908, an infant was referred to my service at the Jewish Hospital by Dr. Humpstone, of the obstetrical division.

The patient was a male, one week old, Russian-Hebrew parentage; four days after birth a papulo-vesicle appeared on the edge of the nail of the index finger; this rapidly changed into a bulla which soon involved the whole finger; almost simultaneously vesicles appeared on the face and then on various parts of the body; the eruption was more severe on the face, hands and feet, little or none over the buttocks; the blebs were from the size of a lentil to a pigeon-egg; they soon became pustular (?) and were covered by thin, greenish-yellow, friable crusts; the child was deeply jaundiced, and, the first week of the eruption, ran a temperature of from 103° to 104° F.

His condition gradually improved; finally the attack terminated in recovery, with very little desquamation.

Two weeks later another two-weeks-old baby in the same ward developed the same sort of cutaneous lesions on the face and fingers, which rapidly spread over the body; the bullæ were flaccid, and the walls were easily broken; this child was not jaundiced, but he rapidly succumbed to the disease and died about three days after its onset.

The labors of both of the mothers had been severe and instrumental, and the mother of the infant that recovered had a severe post-partum hæmorrhage.

The eruption in either case did not appear at all like the pustulo-bullous syphilis seen in infants; nor was there any history of syphilis nor any other skin disease in the parents of either child; the social circumstances of the parents of the child that died were better than those of the parents of the other child, though both of the mothers were personally clean and well-nourished women.

The eruption did not bear any resemblance whatsoever to that of chicken-pox, as claimed by von Kaupe.<sup>8</sup>

The disease did not become epidemic, nor could the second case have contracted the disease from the first, because the first child was immediately isolated, and the second child was still unborn when the eruption appeared on the first. The lesions in the first case somewhat resembled impetigo in its crusting, but this diagnosis was not verified bacteriologically.

Dr. Blatteis, the attending pathologist, made a number of cultures from the contents of the bullæ and succeeded in isolating a chromogenic organism, resembling the bacillus pyocyaneus, and a diplococcus of extremely low vitality which would not grow upon agar, but would grow in bouillon and other media; a similar diplococcus has been isolated from the serum of pemphigus neonatorum by Demme,<sup>9</sup> but the diplococcus that bore the closest morphological resemblance to that isolated by Dr. Blatteis was the one Wellman<sup>10</sup> isolated from the blood and bullous contents of a severe case of acute pemphigoid disease observed in India.

Munro<sup>11</sup> reports the finding of a similar diplococcus in an epidemic of contagious pemphigus in Yokohama. He stated that at one stage of the disease the clinical appearance of the eruption bore a striking resemblance to that of acute infantile pemphigus seen in the European hospitals.

One interesting point that would go far to prove that the above reported cases were not impetiginous in character is the fact that neither staphylococcus nor streptococcus were found in any of the cultures.

Richter,<sup>12</sup> of Bremen, has recently given a splendid review of the literature of pemphigus neonatorum.

In the July (1908) number of the *Annales de Dermatologie et de Syphiligraphie* ("Septicémie à Bacille Pyocyane et Pemphigus Bulleux Chronique Vrai") Petges and Bichelonne report a case of chronic pemphigus vulgaris where the bacillus pyocyaneus was found in the urine, blood and bullous contents; also in the heart blood post-mortem.

During the course of the disease and about the time the bacillus was found in the urine the patient developed an axillary abscess that discharged blue pus.

The article contains a review of the literature of pyocyanic diseases, and the authors conclude from the study of the literature and their case that pyocyanic infection is often the cause of chronic pemphigus and could also be a powerful etiological factor in the allied affection, pemphigus vegetans.

## ERYTHEMA BULLOSA VEGETANS, OR DERMATITIS HERPETIFORMIS.

To illustrate how easily pemphigus, dermatitis herpetiformis and erythema bullosa vegetans of Unna can be confused, permit me to report the following case:

The patient was a male, aged 52, an inmate of a third-rate lodging house, and his general condition was typical of those unfortunate human derelicts, weak and non-resistant. He was vaccinated during an epidemic of small-pox; at first nothing untoward appeared about the point of inoculation, but when he entered the Long Island College Hospital, about three weeks later, there were crops of various sized bullæ about the vaccination sore, in the axillæ and groin; later, blebs the size of a fifty-cent piece appeared over different parts of the body; these were tense and filled with a butter-milk-like fluid; the lesions in the groin and axillæ broke down and were covered with a foul-smelling exudate and vegetations; there were also bullæ in the mouth; the diagnosis of vegetating dermatitis, possibly pemphigus vegetans, was made, but the condition of the patient gradually improved, and in two months from his entrance to the hospital he was discharged, entirely cured of his skin lesions.

In some respects this case resembles those reported by Bowen<sup>13</sup> and Howe<sup>14</sup>: Bullous Dermatitis Following Vaccination.

Meara's<sup>15</sup> case of Pemphigus in Fishdealers and Butchers bears also a slight resemblance to this.

Six months later the man again consulted me for a skin disease which was apparently a genuine case of dermatitis herpetiformis (Duhring); it was of the vesiculo-erythematous type, intensely pruritic, and the lesions showed the classical herpetiform arrangement, and were distributed over the various parts of the body where dermatitis herpetiformis is usually found. There never were any lesions in the mouth or throat.

I was able to watch the case for about a year and a half; on the occasion of his last visit he still had what appeared to be dermatitis herpetiformis, and not pemphigus. Towle,<sup>16</sup> of Boston, has reported a case of pemphigus occurring six months after vaccination.

## BULLOUS ERYTHEMA.

The next two cases to be reported are placed among the erythema-bullous diseases, of infectious origin:

The first I saw in consultation with Dr. Lawrence, of Brooklyn.

She was a girl, aged 18, telephone operator, who consulted Dr. Lawrence for what he diagnosed as a follicular tonsilitis; a few



days after the beginning of the sore throat there was a sudden eruption of blebs all over the body, varying in size from a split-pea to a fifty-cent piece; these were more thickly distributed over the lower part of the trunk and the face, and were surrounded by an erythematous border; the erythema preceded the blister by a few hours, the eruption was intensely pruritic, and, on account of the scratching, many of the older blebs had been ruptured; the throat presented the clinical appearance of follicular tonsilitis, but there were no blebs in the throat or buccal cavity; temperature 102; bowels constipated; urine highly colored and of high specific gravity; it contained neither casts nor albumen.

The patient did not complain of feeling sick, the only discomfort being from the itching; various well-recommended remedies were tried. Her mother, becoming discontented with the attending physician and the consultant, discharged them, and instituted home treatment, which consisted of a daily dose of sulphate of magnesia and sulphur ointment locally.

Except for the erythema, the eruption resembled that of acute pemphigus vulgaris.

The patient recovered under the home remedies and has remained well ever since.

It would not seem probable that the cutaneous outbreak was due to any neurotic element, for she was not a highly organized individual, being rather of the phlegmatic type.

The second case was an attendant at the Manhattan State Hospital for the Insane, Islip, L. I.

The patient was a male, aged 26, native of Maine; he had been an attendant at the hospital nearly two years; after three days' leave of absence he returned to the hospital and was reported on the sick list, suffering from what the resident physicians considered to be follicular tonsilitis; instead of yielding to ordinary treatment, the throat symptoms grew worse; the whole buccal cavity was filled with bullæ, which broke down and became covered with diphtheritic-like membrane; next the lips were involved; the temperature ran up to 104; the patient was delirious; on the fifth day after the beginning of the tonsilitis vesicles appeared on the face and chest; these rapidly spread over the whole body.

The initial and early symptoms of this case were very similar to that reported by Besmann.<sup>17</sup>

Various diagnoses had been made, ranging from small-pox to syphilis, and by the direction of the local health officer the case was isolated. I was then called in consultation.

The patient was a well-nourished young man; nearly the whole cutaneous surface was either denuded or the seat of bullæ ranging in size from a hazel-nut to a goose-egg; the fresh, unbroken ones were tense and surrounded by a deep erythematous areola; on account of his stuporous condition great difficulty was experienced in examining his throat and fauces, but the tip of the tongue and insides of the lips were covered with shreds of mucous membrane; the eyes were closed from the œdema, and there was a bloody discharge from the nose and penis.

I made the diagnosis of acute erythema bullosum and predicted a fatal issue; but greatly to our surprise the patient slowly improved, the skin lesions dried up and healed without scarring, and in six weeks' time he was back in the ward attending to his duties.

The incorrectness of the diagnosis was shown four months later, when he again consulted me for bullæ in the buccal cavity and over the clavicular region.

The eruption now presented the clinical appearance of pemphigus vulgaris, and it rapidly yielded to the ordinary treatment for pemphigus, arsenic, in the shape of Asiatic pill, and general systemic tonics.

The patient remained well for four months, then consulted me for another attack of the eruption, which involved the same location as the previous one; this again promptly yielded to treatment, and there has been no recurrence for over nine months.

It would appear as if these cases were the sequel of the follicular tonsilitis, and if they were, it adds another etiological factor to the tangled skein of the causes of the bullous dermatoses.

#### OPSONIN TREATMENT IN BULLOUS DISEASES.

The following cases were not clinically identical, but they will be reported under one heading, because they were both treated by vaccine prepared from pure cultures taken from the contents of the bullæ.

The first was a case of chronic pemphigus vulgaris. March 11, 1908, I was asked to see Mrs. K. D., an Austrian Jewess, aged 29; seven months before consulting me a small blister appeared on the gum of the upper incisors; the blister increased in size until the whole roof of the mouth was involved; later new blisters appeared on various parts of the buccal cavity and throat; she consulted Dr. Fordyce, of New York, who made a tentative diagnosis of pemphigus.

The lesions of the mouth were the only ones she had for six and a half months, then small blisters appeared over the clavicular

region; she again consulted Dr. Fordyce, who then made the positive diagnosis of pemphigus vulgaris, and advised her to enter a hospital.

Cocks,<sup>18</sup> Richards,<sup>19</sup> and others have reported cases where the buccal cavity was involved many months before the appearance of the skin lesions.

I was asked to see the case two days after Dr. Fordyce had last seen her. She then presented the appearance described as follows:

The mucous membrane of the mouth, throat and lips was denuded, the lips were swollen to three times the normal size; the right eye was entirely closed by bullæ; the trunk, arms, thighs and feet were covered with small vesicles arranged in herpetiforme-like groups; the patient suffered intensely from itching, so much so that if she was not constantly watched she would tear the blisters open to get relief; the itching was more intense on the feet and hands.

I saw her again eighteen hours later; the blisters had greatly increased in size and numbers; nearly the whole cutaneous surface was involved; many of the old ones, especially on the back, had broken, leaving the skin raw and bleeding, and even on these raw surfaces the bullous process seemed to be still going on, and it looked as if an extravasation of serum was lifting up the whole structure of the true skin.

Her family were made acquainted with the unfavorable prognosis, which was made more certain by the fact that she was six months pregnant.

Her temperature was 102, and remained so until the inoculation of the staphylococcic vaccine; all the ordinary treatment was employed, even the continuous bath, but nothing seemed to inhibit the rapid formation of blebs, and nothing but the bath had the slightest effect upon the pruritus.

Four days later a blood and urine examination was made by my clinical assistant, Dr. Potter, which was as follows:

#### *Urine Report.*

Total amount for twenty-four hours, 80 oz. Sp. Gr. 1013. Color, light amber. Reaction acid. No sediment, albumen, sugar, nor casts. Urea, 2 grs. to the ounce. Slight amount of mucous. Normal amount of uric acid. A few phosphatic crystals.

#### *Report of Blood Examination.*

Hæmoglobin 60%. Red cells 3,450,000. Hæmoglobin index

55%. Leucocytes 14,850. Differential count  $4\frac{1}{2}\%$ . Polyneuclears 81%. Eosinophyles 13%. Basophyles  $1\frac{1}{2}\%$ .

Smears were taken from the blood and blisters and tubes of blood serum and agar-agar were inoculated with the blister contents.

Nothing was found in the blood smears, but the serum smears showed the presence of staphylococcus albus, aureus, and citreus. Pure culture of the same organisms were found in the inoculated tubes.

Dr. White, of the Hoagland Laboratory, made a staphylococcic vaccine consisting of one part of albus, one of citreus and two of aureus from these cultures; one cc. represented 500,000,000 staphylococci.

The maximum dose of 32 minims represented one thousand million of the organisms. I gave the first injection nine days after my first visit and repeated them for three successive days, beginning with 8 minims and increasing the dose to 15 minims on the third day.

Twelve hours after the first dose was given the temperature had dropped to 99; there had been no new formation of blisters; twelve hours after the second dose the temperature was normal, no new blisters had formed, and many of the old ones were drying and the ulcerated patches appeared to be healing.

The improvement appeared to be still greater after the third injection, and the patient expressed herself as feeling very comfortable; she could swallow solids, was able to sleep, and it was thought that the disease had been arrested.

Two days later she miscarried, and in twenty-four hours died from exhaustion—about two weeks and one day after my first visit.

The next case in which staphylococcus vaccine was used belongs to the type of general bullous erythema.

Male, native of Ireland, aged 22; had been in America only four weeks when he was admitted to the Kings County Hospital, April 23, 1908; there was no venereal history; he had been vaccinated on shipboard and the vaccination sore was still present when he entered the hospital.

Three days before the appearance of the skin eruption, that is, about three weeks after vaccination, he procured some ointment from a druggist for pediculosis pubes; he applied this ointment very freely to the thighs, abdomen, neck, axillæ and pubes; the next morning he noticed crops of small blisters in the places that had been inuncted; there were bullæ in the mouth and throat; in twenty-four hours from the appearance of the first blister the eruption had



spread over the whole body, including the face and scalp; the blisters were surrounded with an erythematous area; those on the legs were small and many were hæmorrhagic; the eruption did not resemble a vaccinia in any respect, nor could it have been produced by the mercurial ointment.

His temperature on admission to the hospital was 102; this rose on the third day to 104.

Dr. Shradock, the house pathologist, took cultures from the bullous contents and found staphylococci; from these cultures he made a staphylococcus vaccine similar to the one used in the case reported above.

On the sixth day after his admission to the hospital I gave the patient an injection of ten minims, representing about four hundred millions of the organism. Twelve hours later the temperature had dropped to 99; the patient was delirious and was in a bad condition.

On the following day the injection was omitted; the temperature again rose to 100½. Forty-eight hours after the first injection he received another of 15 minims, representing about five hundred millions of organisms; in twelve hours the temperature dropped to normal and remained so for about eight hours, when it again began to rise; he received another injection of 15 minims and the temperature again dropped to normal.

He received altogether six injections of the vaccine; the last was given after a sudden rise of temperature, which again fell and remained normal.

His general condition improved after the second injection; he became rational, was hungry, and slept well.

The interesting feature of this case is the behavior of the skin; no appreciable effect was observed after the first injection of the vaccine, but after the second the whole character of the eruption changed; new blisters ceased forming, those that were present incrustated and dried, and the denuded portions showed evidences of healing; the eruption on the face cleared, the throat and mouth condition improved.

The blood was examined immediately before and twelve hours after the injection was given. The report of the first is appended:

May 2, 1908. Polyneuclear neutrophiles, 72.5%. Small normal cells 11.0%. Large lymphocytes 12.0%. Large normal cells 2.0%. Eosinophiles 1.5%. Transitional cell forms 1.0%.

The next examination was made six hours after the second injection: Polyneuclear neutrophiles 78.0%. Large lymphocytes

13.0%. Large mononeuclear cells 1.5%. Small mononeuclear cells 5.5%. Transitional cells 0.5%. Eosinophiles 1.5%.

Examination of the urine showed nothing abnormal.

The opsonic index was not taken in either case, and the resort to this method of treatment was because of the desperate condition of the patient, the lack of benefit from the usual remedies and a desire to test the effect of the vaccine.

Two cases are an insufficient number upon which to base conclusions; one of these cases died, and the other might have improved without any treatment; but the fact remains, the general condition and the cutaneous eruption of both patients promptly changed for the better after the institution of this treatment.

I was able to find the record of only one case of bullous dermatoses treated by vaccine. This was reported by Bushnell and Williams,<sup>20</sup> who used tuberculine in a case of dermatitis herpetiformis.

The difference of eosinophilia is interesting; in the chronic case it was 13%, and in the acute only 1½%.

This difference might prove an instructive differential point in the study of the bullous dermatoses.

In conclusion I wish to ask the pardon of the Association for presenting a paper made up of case reports, and to offer as an excuse the general dermatological interest in the bullous diseases and my desire to bring before you and to put upon record some cases having features out of the usual.

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## SOCIETY TRANSACTIONS.

### THE PHILADELPHIA DERMATOLOGICAL SOCIETY.

The regular monthly meeting of the Philadelphia Dermatological Society was held at the Polyclinic Hospital, on Tuesday evening, October 20, 1908, at 8:30 o'clock. Dr. M. B. Hartzell presiding.

#### **Lichen Urticatus, A Probable Case of.** Presented by DR. GASKILL.

The patient was a well-formed infant of ten months. Twelve weeks previously the mother had first noticed the appearance of hive-like lesions on the arms and the face, which were extremely itchy. These lesions increased in number and irritability until at present the face, the dorsal surface of the hands, the arms, the buttocks, and the scalp are well covered, the trunk and the legs being only sparsely attacked. The eruption apparently first appeared as pinkish spots, developing a white, slightly raised, wheal-like centre, after a short time a minute vesicle would appear on the wheal. At times a small papule was formed instead of a vesicle. Excoriations and scratch marks were also present, the infant scratching the top off of the vesicle or papule. Some pustules and crusts were present as the result of infection from the scratching of the infant.

All of those present decided that probably the name lichen urticatus was the most descriptive of the lesions present.

#### **Morphoea, A Well Marked Case of.** Presented by DR. SCHAMBERG.

The patient exhibited was a healthy female of forty years. Until four months ago the general cutaneous surface was in normal condition; at that time the present lesion started. The first indication of an outbreak consisted of intense itching at the site of the present lesion. On examination a small white shiny area was discovered posteriorly over the right scapula, this spot increasing in size. The lesion at present is palm-sized, yellowish-white in color, practically on the level of the skin, with the normal furrows of the skin coursing the same, shiny like lichen, parchment-like, smooth, and slightly denser than the normal skin. Surrounding this lesion the skin was slightly pinkish, the color being caused by numerous small capillaries.

Dr. DUHRING remarked that the condensation of tissue in morphoea resembled markedly that found in scleroderma, the difference being in the hardness.

#### **Psoriasis of a Seborrheic Type, A Probable Case of.** Presented by DR. HARTZELL.

The patient, a male of fifty-one years, born in Ireland, had been under observation for four months, with some improvement in his condition. Fourteen months ago numerous slightly scaly lesions appeared on

the trunk, then on the extremities, and finally on the face. These lesions varied considerably in size, from a split-pea to a dime, they were reddish in color, and were covered with a yellowish-white, somewhat greasy looking scale, pruritus was marked. When first seen practically the entire body was involved by the eruption, the lesions having become confluent, scarcely a spot of normal skin could be found from the top of the head to the sole of the foot, excepting the palms and the soles. The eruption was bright-red in color, slightly scaly, and the pruritus was so severe as to prevent sleep. The note was made at that time that the condition resembled a dermatitis exfoliativa. At the present time there is a slightly raised, scaly eruption, dark-red in color on the legs resembling slightly lues; on the lower part of the abdomen there is a pinkish eruption, retiform in arrangement, reddish areas are also present on the face, the arms, and the legs, and the scalp is also red and scaly. There is now practically no eruption over the sternum or between the shoulders.

Dr. SCHAMBERG called attention to the pronounced seborrhoic element in the case as shown by patches in the neighborhood of the nose. He suggested the possibility of having both psoriasis and eczema seborrhoicum present.

Dr. DAVIS thought it resembled somewhat the pityriasis rubra described by Hebra.

Dr. STELWAGON thought the case probable a seborrhoic type of psoriasis. He also suggested the possibility of lichen variegatus.

### **Telangiectases in a Child, A Marked Case of. Presented by DR. DAVIS.**

The patient was a girl of eleven years and until five years ago had been apparently normal. At six years of age she developed a severe attack of rheumatism, which kept her in bed for some weeks, the heart being markedly involved by the attack. Following this illness the heart still remained extremely weak and dilated, so much so that the child could not take any active exercise, being also extremely short of breath. She remained thus a semi-invalid until February of this year, when she suddenly became unconscious, her entire right side being paralyzed. She could not articulate for a week. She gradually improved until in about five weeks the right side was about normal once more. In June she had another attack of the same character, attacking the right side, lasting three weeks, the mouth was drawn to the right side, and the tongue was very much swollen. Two years ago, or three years after the attack of rheumatism, small capillary blood vessels started to appear on the cheeks, gradually increasing in number. One year ago capillary blood vessels appeared on the legs and the arms. The child at present is fairly robust looking, with a bluish-red tinge to the face, the mucous membrane of the lips being of an almost normal color. The face is almost entirely covered with small capillaries, the cheeks being markedly involved. The forearms are of a pinkish shade from the innumerable dilated capillaries, extending from the elbow to the wrist. The lower legs are likewise attacked by these minute blood vessels, giving a somewhat cyanosed appearance to the extremities. The



color can almost entirely be removed from the parts attacked by pressing on the minute blood vessels; on the cheeks however there is a slight pigmentation and roughening. The pulse is somewhat irregular and a soft blowing murmur can be heard at the apex. Itching and burning are mildly present.

Those present thought that the sudden attacks of paralysis were probably due to embolism.

Dr. HARTZELL referred to the resemblance between this case and the cases of telangiectases shown before the American Dermatological Association in Baltimore.

Dr. DAVIS suggested the resemblance of some of the lesions to those found in the angioma serpiginosum of Hutchinson.

**Miliary Pustular Syphiloderm, resembling a Folliculitis.** Presented by Dr. HARTZELL.

The patient was a male of twenty-eight years, a sailor by occupation, born in England. Nine weeks ago a small abrasion appeared on the penis, just posterior to the glans; this lesion has increased in size and hardness. Three weeks ago the present eruption appeared generally over the trunk, the face, and the extremities. This eruption is markedly inflammatory, distinctly follicular, bright-red, pustular, and has a slight scale or crust. The lesions are mostly pinhead-sized, but on the forearm are somewhat larger. The inguinal and the posterior cervical glands are enlarged; there is also a slight pharyngitis. The eruption resembled markedly a paraffin dermatitis, and before the initial lesion was discovered such was the supposed diagnosis.

Dr. HARTZELL stated that the only reason the initial lesion had been sought was that only a short time previously another case of the same type had proved to be syphilitic.

Those present thought that the resemblance to folliculitis was marked.

**Keratosis Palmaris et Plantaris, A Case of.** Presented by Dr. SCHAMBERG.

The patient, a girl of nine years, had had this condition since infancy. The first thing the mother had noticed was the roughening and thickening of the palms of the hands and the soles of the feet, this becoming progressively worse. The condition seems to be more marked in winter than in summer. Little change has, however, occurred in the derangement during the last two or three years. The palms and the soles are almost equally involved, considering the usual thicker corneous layer of the soles of the feet, practically the entire palmar and planter surfaces are involved. The skin surface is rough, horny, almost verrucous in spots, it is of a dirty brownish-black color, with deep furrows and some fissures crossing the same, the natural lines of the skin are either exaggerated or obliterated, the skin of the fingers are also involved in a like manner, the corneous layer is tremendously thickened. Some of the nails are also

thickened. At the circumference of these thickened areas there is some reddening, inflammation of the sound skin. The interesting fact was discovered that the mother also has had the same condition all her life, but in a milder degree; three other children are supposedly normal.

Dr. STELWAGON mentioned that the disease at times follows only the female line.

Dr. SCHAMBERG thought because of the inflammatory areolar around the thickened corneous layer, the case should be classed under the heading of *keratoderma symmetrica erythematos*, as described by Besnier.

**Herpes Zoster of a Rare Distribution, A Case of.** Presented by Dr. DAVIS.

The patient, a male of fifty years, first came for treatment six days ago, complaining of severe pains in the head. The attack first commenced ten days previously with aching pains in the left temple, spreading over the left side of the face to the corner of the mouth, the patient being unable to sleep because of the pain. Three days after the beginning of the pain, groups of vesicles started to appear on the left cheek and chin, others developing on the lip, and the temporal region. The patient because of the severe pains, and a hectic temperature, was put to bed, the temperature reaching 103 degrees Fahrenheit. At present groups of typical, unbroken or drying up, vesicles are found on the left temporal region, the left cheek, the corner of the mouth, the left side of the lower lip, the left side of the tongue, and the inner side of the left cheek.

Those present agreed that the case was unusual because of the distribution of the lesions and the severity of the symptoms.

**Lichen Planus, A Marked Case of.** Presented by Dr. STOUT.

The patient exhibited was a male of thirty-one years, and until two months ago had been in normal condition. The present attack started with the appearance of pinhead-sized, shiny papules upon the wrists and forearms, these lesions rapidly increasing in number. The papules are typical in every way, the bases being irregular, angular in shape, very shiny, some slightly umbilicated, and of a violaceous color, slightly scaly. Practically the entire body had been attacked, the extremities, the trunk, a few lesions on the face, and a few also on the penis; the mucous membrane of the cheeks had also exhibited slight involvement. Itching and burning had been severe. The case was presented to show the marked pigmentation that occurs in these cases as the lesions involute; the pigmentation was very marked on the buttocks and thighs, evidently where the papules had been confluent.

**Small Pustular Scrofuloderm (Duhring), A Case of the.** Presented by Dr. SCHAMBERG.

The patient was a boy of seven years, born of Russian parents. The

present eruption first appeared three years ago as minute pinhead-sized, slightly raised lesions, increasing to the size of a small split-pea. The boy was poorly nourished in appearance, small, and anæmic, there was no marked enlargement of the glands. The lesions evidently started as small papules, somewhat hard, becoming pustular in the center, finally leaving a pit-like scar at the site of the lesion. There were about a score of lesions in all, on the face, the dorsal surface of the hands and the fore-arms, the lower legs, and on the feet. The papulo-pustules were discrete, there was no tendency to confluence, the color was a dark-yellow, there was practically no inflammatory areolar. Subjective symptoms were almost absent.

Dr. STELWAGON said he thought most of these cases occurred among the Russians. He also stated that he had seen three cases of this type in the same family.

Dr. SCHAMBERG said he thought these cases ought to be classed under the heading of acnitis. He also stated that he intended trying Moro's tuberculin test on the patient, to see if a reaction would occur.

Dr. DUHRING considered that the case belonged under the heading of the small pustular Scrofuloderm, as described by him. He also referred to the cases of this type that Dr. Wallis had reported.

#### **A Case for Diagnosis. Presented by Dr. DAVIS.**

The patient presented was a Jewish girl of sixteen years, healthy in appearance, and of good family history. Eight months ago the present eruption started with a small papular outbreak on the left side of the lower lip at the vermilion border. More papules appeared and increased in size until at present there is a crusted lesion, dime-sized, somewhat indurated, on the left side of the lower lip, involving both the mucous membrane and the skin surface; it is raised, and has a somewhat papillomatous surface. On the right side of the lower lip there is another lesion, extending to the median line of the lip, dark-red in color, with a papillomatous, slightly raised surface, sharply marginate, with a serpigenous raised edge; there are miliary abscess-like openings on the surface, no secretion can be squeezed from these, the mucous membrane and the skin of the lip are both attacked.

Dr. DAVIS and Dr. KNOWLES had originally thought the condition to be syphilitic, but the patient had not responded to either mercury or the iodides.

Dr. SCHAMBERG thought it resembled markedly a bromide eruption.

Dr. STELWAGON thought it syphilitic.

Dr. HARTZELL thought the edge of the lesion looked tubercular, probably an atypical case of lupus vulgaris.

Dr. DAVIS said the possibility of blastomycosis had also occurred to him.

#### **Erythema Elevatum Diutinum, A Case of. Presented by Dr. SCHAMBERG.**

The patient exhibited was a boy of thirteen years, somewhat anæmic

in appearance, with a scar on the right side of the neck, where an old sinus from a broken-down gland had healed. The present lesions started to appear nine weeks ago with the development of a nodule, on the inner surface of the ring finger of the left hand, other superficial lesions attacking the arms and the legs. The lesion on the finger is at present five-cent-piece in size, annular, raised about one-eighth of an inch above the skin surface, yellowish in color, infiltrated, with a slightly depressed center and a nodular border, button-like. There are fully twenty lesions scattered over the forearms and the lower legs, from dime- to five-cent-piece-sized, pinkish in color, irregularly annular, and superficial. Some few of these lesions have become confluent. The hands are slightly swollen, suggesting some rheumatic condition.

Dr. DUHRING stated that he preferred the title *granuloma annularis*.

Those present agreed with the diagnosis but commented upon the superficial lesions on the arms and the legs.

#### Phlebitis Following a Dermatitis, A Case of. Presented by Dr. SCHAMBERG.

Six days ago the patient, a girl of fourteen years, noticed a slight red eruption on the right forearm, for which she applied camphorated oil. This produced a dermatitis, marked œdema and swelling of the entire arm, a vesicular, dark-red eruption, a superficial phlebitis, and high fever, practically a cellulitis. The dermatitis has somewhat quieted down, the phlebitis is, however, present, some œdema and swelling remains, a dusky color is present, and there is beginning exfoliation.

#### Scleroderma, A Case of. Presented by Dr. SCHAMBERG.

The patient exhibited was a male of twenty years; the present change in the skin had started at the age of four, the condition being progressive until now. The board-like change in the skin was quite extensive, the face, the hands including the fingers, and the upper legs were involved. The face was somewhat rigid, the natural furrows of the cheeks and the forehead being obliterated, the typical hard, smooth, yellowish-white surface and the resistance to touch was present. The cheeks and the forehead were chiefly involved, also the entire dorsal surface of the hands and the dorsal and palmar surfaces of the fingers. The skin was of a dusky, cyanotic color, smooth, hard, resistant, and pigmented. The fingers were cold, lifeless, stiff, and could be moved with difficulty. There was ulceration of the tips of some of the fingers, probably due to interference with the terminal circulation or the trophic nerves.

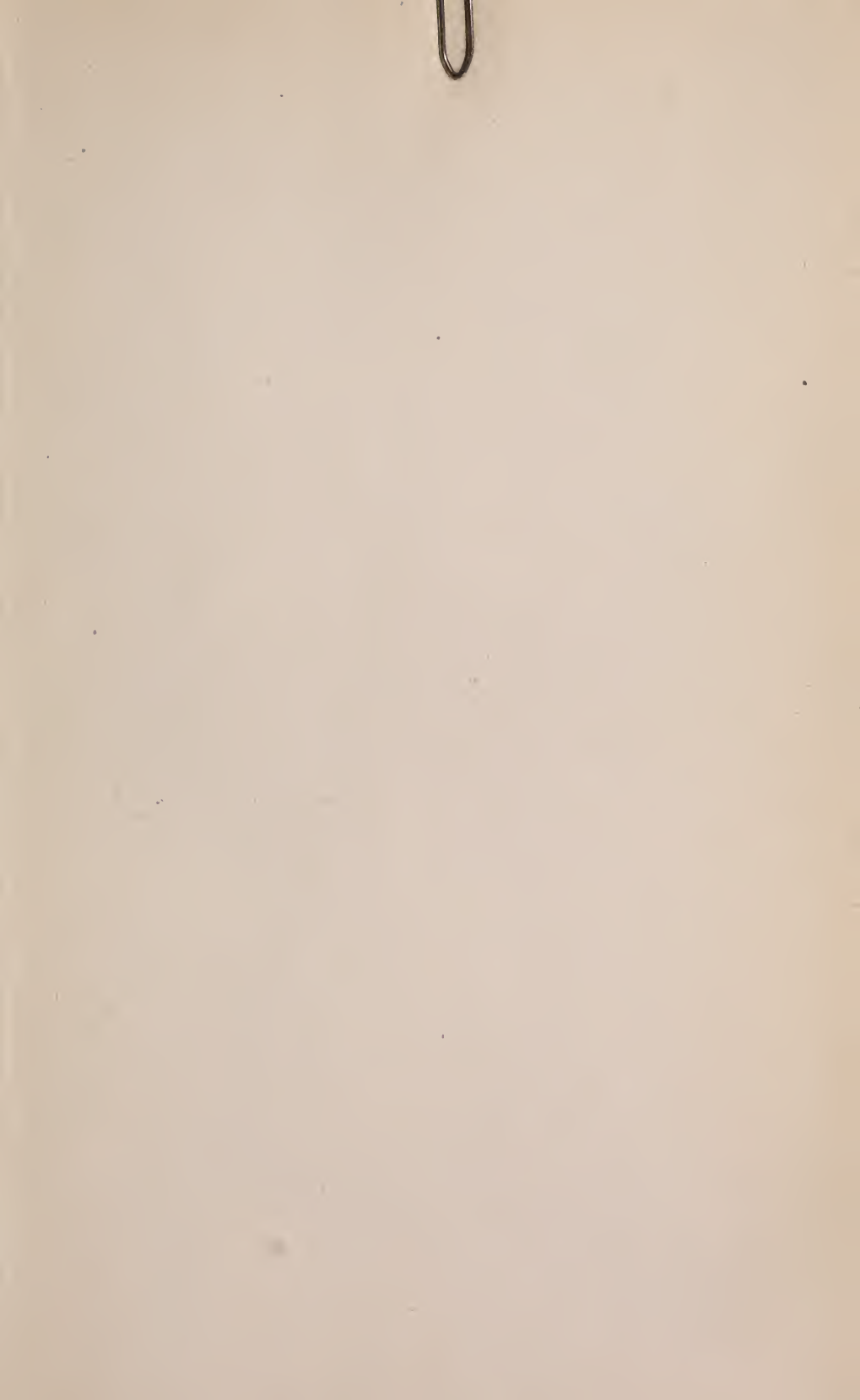
Some of those present suggested that the obliteration of the furrows of the face simulated the condition found in hemiplegia.

FRANK CROZER KNOWLES, M. D., Reporter.









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